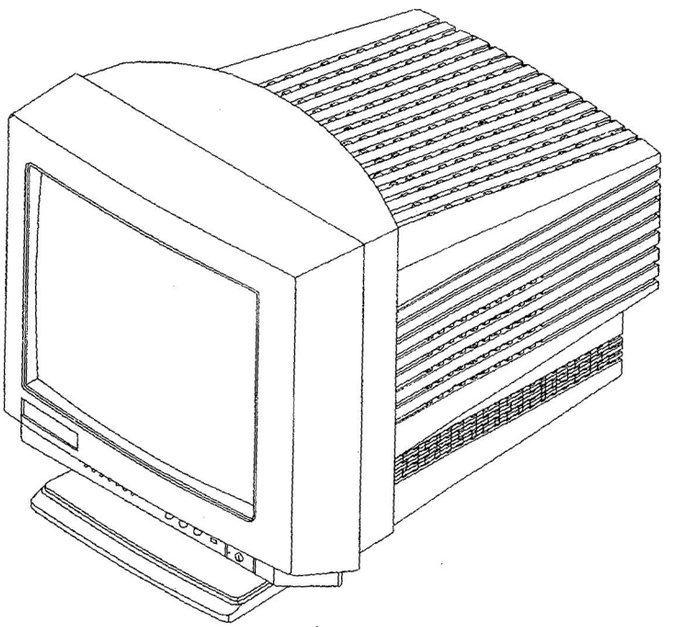
SERVICE MANUAL

COLOR MONITOR

SPECTRUM 4V/4VA/4Vlr/4VlrA



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1. SPECIFICATIONS FOR D350 COLOR MONITOR

1. CRT
   35.5CM(14V) 90 Deflection, 29mm Neck, 0.28mm Dot Pitch, Non-Glare Screen

2. Viewable image Size: 33CM (13") diagonal

3. Display Color: Unlimited Colors

4. External Controls:
   Power On/Off, UP/Down key, Function key: Contrast, Brightness, H-Size, H-phase, V-Size, V-Center, Pincushion, volume (for 4VA/4VlrA only)

5. Input Video Signal

	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5	Mode 6	Mode 7	Mode 8	Mode 9
	RGB Analog	RGB Analog	RGB Analog	RGB Analog	RGB Analog	RGB Analog	RGB Analog	RGB Analog	RGB Analog
Horiz. Sync:	TTL Level	TTL Level	TTL Level	TTL Level	TTL Level	TTL Level	TTL Level	TTL Level	TTL Level
	Negative	Negative	Negative	Negative	Positive	Positive	Negative	Negative	Positive
Vert. Sync:	TTL Level	TTL Level	TTL Level	TTL Level	TTL Level	TTL Level	TTL Level	TTL Level	TTL Level
	Negative	Negative	Negative	Negative	Positive	Positive	Negative	Negative	Positive

6. Resolution

Horizontal:	720 (H)	640 (H)	640 (H)	640 (H)	800 (H)	800 (H)	1024 (H)	640 (H)	800 (H)
Vertical :	400 (V)	480 (V)	480 (V)	480 (V)	600 (V)	600(V)	768 (V)	480(V)	600 (V)
Fh (KHz):	31.5	31.5	37.5	37.8	37.8	46.8	48.2	43.3	48.1
Fv (Hz) :	70	60	75	72	60	75	60	85	72

7. Display Size
   Horizontal: 250 mm
   Vertical: 187 mm

8. Scanning Frequencies
   Horizontal: 30KHz ~ 50KHz
   Vertical: 50 Hz ~ 100 Hz

9. Factory Preset Timings: 9
   User Timings: 11

10. Misconvergence
    Center: 0.3 mm Max.
    Corner: 0.4 mm Max.

11. Video Bandwidth: 80 MHz

12. Power Source:
    Switching Mode Power Supply
    AC 100 ~240V, 50/60Hz Universal Type

13. Operating Temperature: 0°C to 40°C Ambient

14. Humidity:
    10% to 85% Relative, Non-Condensing

15. Weight: 10.7Kgs(Net), 12.5Kgs(Gross) for 4V/4Vlr
    11 Kgs(Net), 12.8Kgs(Gross) for 4VA/4VlrA

16. Dimensions Monitor:
    Carton: 438(W)×394(H)×460(D) ㎜
    Monitor: 350(W)×352(H)×370(D) ㎜

17. External Connection:
    15 Pin D-type Connector
    AC Power Cord

18. Speaker: (for 4VA/4VlrA only)
    Rate power: 2W (per channel)
    Impedance: 8 Ω

19. Regulations:UL, CSA, DHHS, FCC-B, TÜV/GS, CE
    TÜV/MPR-II (for 4Vlr/4VlrA only)

2. PRECAUTIONS AND NOTICES

2-1 SAFETY PRECAUTIONS

1. Observe all caution and safety related notes located inside the display cabinet.

2. Operation of the display with the cover removed, may cause a serious shock hazard from the display power supply. Work on the display should not be attempted by anyone who is not thoroughly familiar with precautions necessary when working on high voltage equipment.

3. Do not install, remove or handle the picture tube in any manner unless shatter-proof goggles are worn. People who are not so equipped should be kept away while handling picture tube. Keep picture tube away from the body while handling.

4. The picture tube is constructed to limit X-RAY radiation to 0.5 mR/HR. For continued protection, use the designated replacement tube only, and adjust the voltages so that the designated maximum rating at the anode will not be exceeded.

5. Before returning a serviced display to the customer, a thorough safety test must be performed to verify that the display is safe to operate without danger or shock. Always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as screw heads.
   Test method for current leakage is described as follow.

   (a) Plug the AC line cord directly into rated AC outlet (do not use a line isolation transformer during this check).

   (b) Use an AC voltmeter having 5000 ohms per volt or with more sensitivity in the following manner: Connect a 1500 ohms 10 Watt resistor, paralleled by a 0.15UF, AC type capacitor between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts simultaneously. Measure the AC voltage across the combination of 1500 ohms resistor and 0.15UF capacitor.

   (c) Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part.

   (d) Voltage measured must not exceed 0.5 volts RMS. This corresponds to 0.35 milliamp AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

2-2 PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety visual inspections and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Before replacing any of these components read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-RAY radiation or other hazards.

2-3 SERVICE NOTES

1. When replacing parts or circuit boards, clamp the lead wires around terminals before soldering.

2. When replacing a high wattage resistor (more than 1/2W of metal oxide film resistor) in circuit board, keep the resistor about 10㎜ (1/2 in) away from circuit board.

3. Keep wires away from high voltage or high temperature components.

4. Keep wires in their original position so as to reduce interference.

2-4 HIGH VOLTAGE WARNING

Operation of monitor outside of cabinet or with back removed may cause a serious shock hazard. Work on this model should only be performed by those who are thoroughly familiar with precautions necessary when working on high voltage equipment.

Exercise care when servicing this chassis with power applied. Many B plus and high voltage terminals are exposed which, if carelessly contacted, can cause serious shock or result in damage to the chassis. Maintain interconnecting ground lead connections between chassis and picture tube dag when operating chassis.

Certain HV failures can increase X-ray radiation. Monitor should not be operated with HV levels exceeding the specified rating for the chassis type. The maximum operating HV specified for the chassis used in this monitor is

24.5KV ± 1KV

with a line voltage of 120/240 VAC. Higher voltage may also increase possibility of failure in HV supply.

It is important to maintain specified values of all components in the horizontal and high voltage circuits and anywhere else in the monitor that could cause a rise in high voltage or operating supply voltages. No changes should be made to the original design of the monitor. Components shown in the shaded areas on the schematic should be replaced with exact factory replacement parts. The use of unauthorized substitute parts may create a shock, fire or other hazard.

To determine the presence of high voltage, use an accurate, high impedance, HV meter connected between second anode lead and CRT dag grounding device. When servicing the High Voltage System, remove static charge from it by connecting a 10K ohm resistor in series with an insulated wire (such as a test probe) between picture tube dag and 2nd anode lead.(AC line cord disconnected from AC power outlet.)

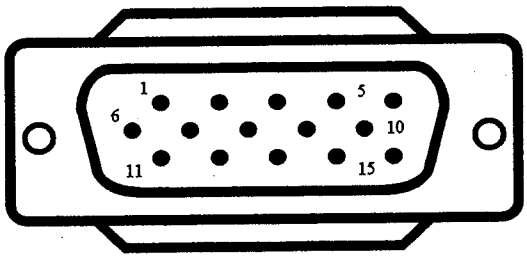
The picture tube used in this monitor employs integral implosion protection. Replace with tube of the same type number for continue safety. Do not lift picture tube by the neck. Handle the picture tube only after discharging the high voltage completely.

3. OPERATING INSTRUCTIONS

This procedure gives you instructions for installing and using the D350 color display.

1. Position the display on the desired operation and plug the power cord into a convenient AC outlet. Three-wire power cord must be shielded and is provided as a safety precaution as it connects the chassis and cabinet to the electrical conduit ground. If the AC outlet in your location does not have provisions for the grounded type plug, the installer should attach the proper adapter to ensure a safe ground potential.

2. Connect the 15-pin color display shielded signal cable to your signal system device and lock both screws on the connector to ensure firm grounding. The connector information is as follow:



15 - Pin Color Display
Signal Cable

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1.	RED	9.	NC
2.	GREEN	10.	GND
3.	BLUE	11.	SYNC. GND
4.	GND	12.	NC (* SDA)
5.	GND	13.	HORIZ. SYNC
6.	GND-R	14.	VERT. SYNC (*VCLK)
7.	GND-G	15.	NC (* SCL)
8.	GND-B		* FOR DDC MODEL

3. Apply power to the display by turning the power switch to the "ON" position and allow about thirty seconds for display tube warm-up. The Power-On indicator lights when the display is on.

4. With proper signals feed to the display, a pattern or data should appear on the screen, adjust the brightness and contrast to the most pleasing display.

5. This monitor has power saving function following the VESA DPMS. Be sure to connect the signal cable to the PC. Other the monitor shall enter OFF state and the power can't be on.

6. If your D350 color display requires service, it must be returned with the power cord.

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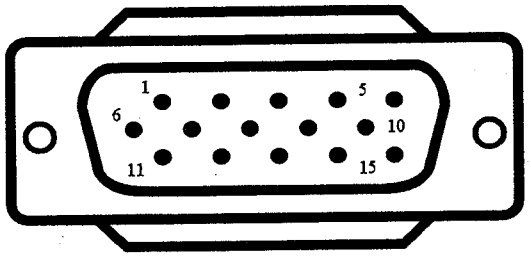

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4. ADJUSTMENT

4-1 ADJUSTMENT CONDITIONS AND PRECAUTIONS

1. Approximately 30 minutes should be allowed for warm up before proceeding.

2. Adjustments should be undertaken only on those necessary elements since most of them have been carefully preset at the factory.

4-2 MAIN ADJUSTMENTS

NO.	FUNCTION	LOCATION	DESIGNATION
1.	14.5V ADJ	PCB - MAIN	VR901
2.	B + ADJ	PCB - MAIN	VR903
3.	R.B. DRIVE	CRT - BOARD	VR802,803
4.	R.G.B. CUT-OFF	CRT - BOARD	VR804,805,806
5.	ABL ADJ	PCB - MAIN	VR704
6.	HOR. HOLD	PCB - MAIN	VR201
7.	VERT. HOLD	PCB - MAIN	VR602
8.	UP KEY	PCB - MAIN	SW101
9.	DOWN KEY	PCB - MAIN	SW102
10.	FUNCTION KEY	PCB - MAIN	SW103
11.	FUNCTION INDICATOR(LED)	PCB - MAIN	LED2 ~ LED8
12.	KEYSTONE ADJ	PCB - MAIN	VR701

4-3 ADJUSTMENT METHOD

1. 14.5V, B + & HV protection Voltage Adjustment:

   A. Chroma-2000 Signal generator or PC equivalent set mode 3, VGA 640×480 pattern 1.0 .

   B. Connect a DC Voltage meter between TP 901 and ground, then adjust VR901 to be 14.5VDC.

   C. Connect a DC Voltage meter between TP 903 and ground, then adjust VR903 to be 93 VDC. (Use TOSHIBA CRT Set adjust to 92 VDC)

2. Horizontal Sync. Adjustment:

   A. Set mode 5, 800×600 Fh: 37.8KHz pattern 1.0 .

   B. Connect TP401 to Ground. (Short H-sync signal)

   C. Adjust VR201 till the image to be stable, then disconnect TP401 to Ground.

3. Vertical Sync. Adjustment:

A. Set mode 2, 720×400 Fh: 31.5KHz pattern 1.0 .

B. Connect a oscilloscope between TP601 and Ground.

Then adjust VR602 to be a triangle waveforms as shown in Figure 1

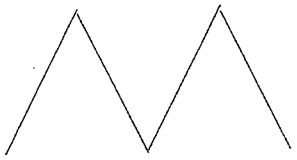


Figure 1

4. Factory preset Timings Adjustment:

A. When you turn on the monitor, the seven LEDS will light up simultaneously for a while, then extinguish.

B. You can press the up/func two keys simultaneously, the most left four LEDS will light up for a while then extinguish.

C. Then you can select one of the seven functions including Brightness, Contrast, H-SIZE, H-PHASE, V-SIZE, V-CENTER and pincushion, Simply press the function key and the LED will be light up corresponding to the one selected, then press the up/down keys to get the factory presetting parameter value or to your satisfaction.

D. Then you will press the up/func two keys simultaneously again, the most right three LEDS will light up for a while then extinguish after the factory preset timings adjustment is finish.

5. White Balance, Luminance Adjustment:

A. Bias (Low light) adjustment:

(a) Set mode 7 1024×768 Fh: 48.2KHz full white pattern.

(b) Adjust VR802, 803, 804, 805, 806, TO make in the center position of VR.

(c) Warm up more than 20 minutes.

(d) Brightness set to maximum. Contrast set to min. full white pattern, then adjust FBT screen VR to make Y= ± 1.2FL

(e) Brightness set to raster just cutoff, adjust contrast set to be 4FL, then adjust CRT board VR804 (B-Bias) VR806 (R-Bias) to make Y= 4 ± 0.2 FL, x= 281 ± 10, y= 311 ± 10

B. Gain (High light) adjustment:

(a) Set mode 7 1024×768 Fh: 48.2KHz full white pattern.

(b) Brightness set to raster just cutoff and set the cantrast to max.

(c) Adjust VR802, 803 to make color code x=281 ± 10, y=311 ± 10.

C. Recheck item A&B to make sure both of them in spec.

D. Full white luminance:

(a) Set mode 7 1024×768 Fh: 48.2K full white pattern.

(b) Image Size : H:250±4mm V:187±4mm.

(c) Brightness set to raster just cut off and set the contrast to max.

(d) Adjust VR704 to make sure white luminance at 25 FL.

6. Focus Adjustment:

A. Set mode 2 640×480 Fh: 31.5KHz with character full page.

B. Adjust external brightness to detent center and external contrast to max. , then adjust focus VR to make the display be focused very well.

7. Purity Adjustment

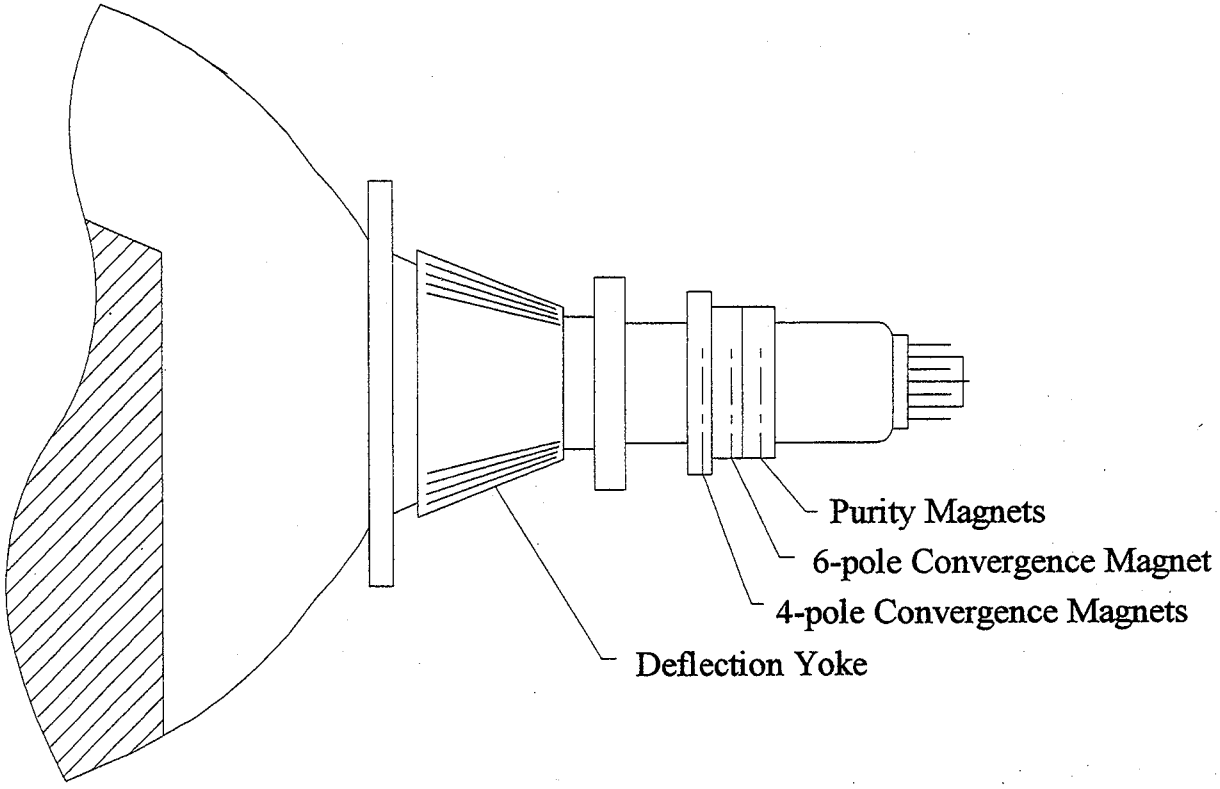
A. Be sure that the display is not being exposed to any external magnetic fields.

B. Ensure that the spacing between the Purity, Convergence, Magnet, (PCM), assembly and the CRT stem is 29㎜ .(See below diagram)

C. Produce a complete, red pattern on the display. Adjust the purity magnet rings on the PCM assembly to obtain a complete field of the color red. This is done by moving the two tabs in such a manner that they advance in an opposite direction but at the same time to obtain the same angle between the two tabs, which should be approximately 180'.

D. Check the complete blue and complete green patterns to observe their respective color purity. Make minor adjustments if needed.

RELATIVE PLACEMENT OF TYPICAL COMPONENTS



8. Convergence Adjustment

A. Produce a magenta crosshatch on the display.

B. Adjust the focus for the best overall focus on the display.
Also adjust the brightness to the desired condition.

C. Vertical red and blue lines are converged by varying the angle between the two tabs of the 4 pole magnets on the PCM assembly. (See above diagrams)

D. Horizontal red and blue lines are converged by varying the two tabs together, keeping the angle between them constant.

E. Produce a white crosshatch pattern on the display.

F. Vertical green and magenta lines are converged by varying the angle between the two tabs of the 6-pole magnets.

G. Horizontal green and magenta lines are converged by varying the two tabs together, keeping the angle between them constant.

5. CIRCUIT DESCRIPTION

5-1 MICRO CIRCUIT

IC101 is CPU, This CPU has the following functions.

1. Detect timing mode by sensing the Horizontal frequency, Vertical frequency, the polarity of Hor. Sync and Ver. Sync.

2. Key Board scan control.

3. Geometry and volume (4VA/4VlrA only) control internal D/A converters.

4. Cs capacitor switch control.

5. Power saving control.

When CPU detects a timing, it takes data from E²PROM (IC102), then output voltage to control the geometry and volume (4VA/4VlrA) of this monitor.
If Key is pressed, the CPU will do some job according to the Key function. For example, if Function Key is pressed, it can change different value to control screen geometry (H-SIZE, V-SIZE.....etc.)

5-2 DEFLECTION CIRCUIT

Hor. Sync. and Ver. Sync., come from PC, go into the CPU (IC101). The output flows into the Hor. oscillation and Ver. oscillation processor (IC401). The IC401 treats Sync. signal and output the drive signal to Horizontal and Vertical output circuit. IC401 also generates some waveforms for geometry use, like, Horizontal Phase, Vertical Size, by DC voltage control, the geometry can be controlled. IC601 is a Vertical output IC to supply the Vertical scan. Q413, Q414 and L404 are the Horizontal Size controls.IC701 is pincushion amplifiers. Q811 is the MOSFET to switch the Cs capacitor. Q408 is the Horizontal deflection output, supply the Horizontal scan of the monitor. Q702 and Q703 generate the Blanking signal output to G1 of CRT.
Q709, Q710, Q711 and Q712 are for MUTE control, Brightness control and G1 DC voltage output.

5-3 VIDEO CIRCUIT

IC801 is a video amplifier, clamping signal input from pin No. 14 to restore the DC voltage of video signal, the signal output from IC801 pass through Cascode amplifier stage Q804, Q805, Q806, Q807, Q808 and Q809, then go to the cut off DC restore stage. VR804, VR805 and VR806 Amplitude of video output signal is about 40Vpp.

5-4 POWER SUPPLY

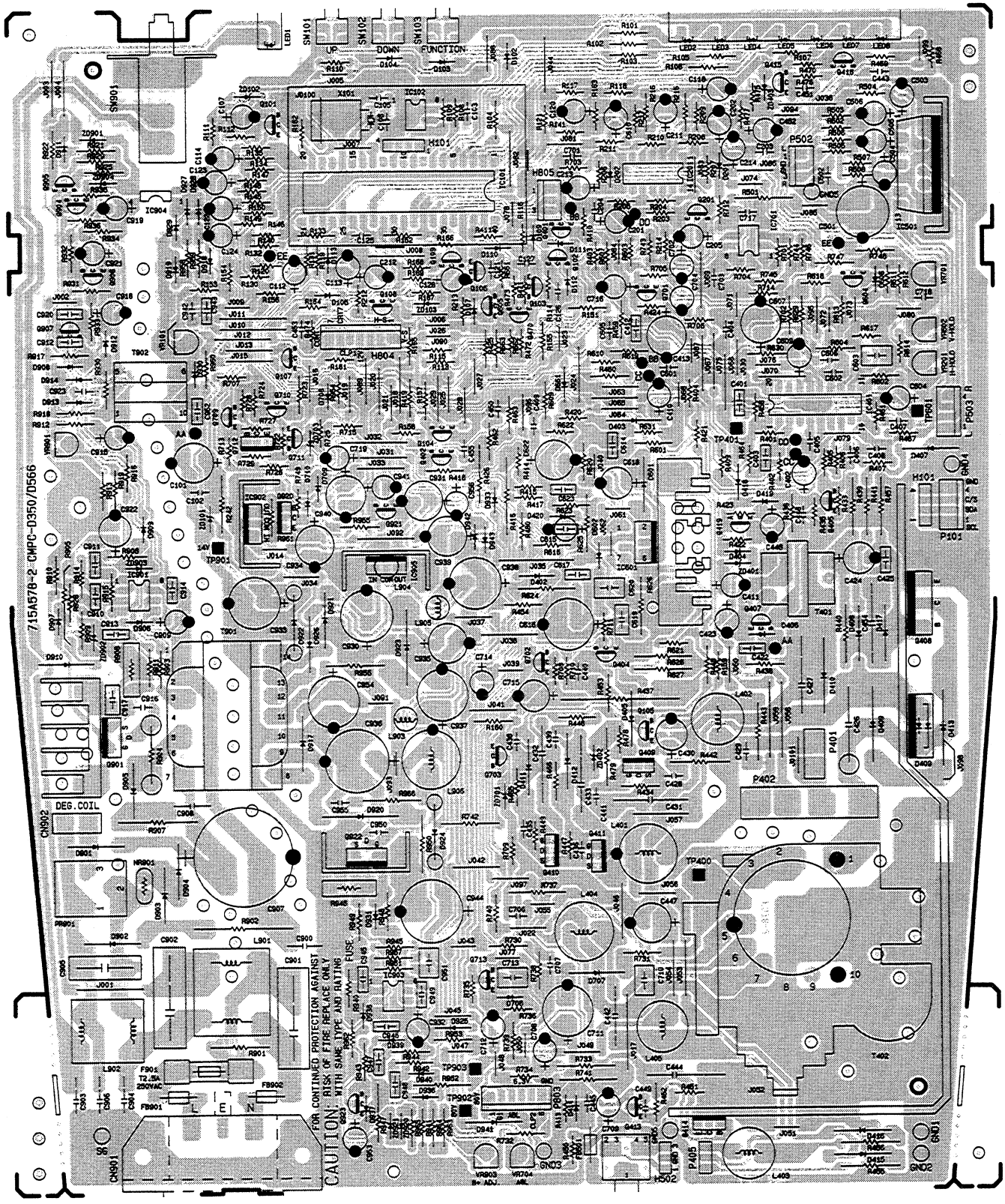
The design uses a discontinuous flyback topology operating in current-mode resulting in a multiple output switcher with stack well. faster diodes are used. The fast transient response of the control loop maintains picture integrity. Very fast current limiting protects the switcher agains short circuits.

UC3842AM(IC901) is the current mode controller selected. It offers feed forward compensation, feedback error amplifier, and low voltage lock out features. The 3842 draws very little current is start up mode. There is enough power from the line bleeder to slowly charge a capacitor to the 16 volts needed to start the switcher.

The FET starts a cycle by allowing current to flow into the primary of the power transformer. As current ramps up with time, the voltage across the current sense resistor (R908) also ramps to a point where the 3842 determines that enough power is stored and turns off the FET. As the voltage on the transformer reverses, power is dumped from the main power transformer through diodes into the different supplies. To keep RFI to a minimum and reduce transistor heating, a turn-off snubber network is placed across the FET. Current from the secondary windings are rectified and filtered to freate the desired voltages. Small high current capacitors quickly return charging current to the souce. Filter inductors remove high frequency noise.

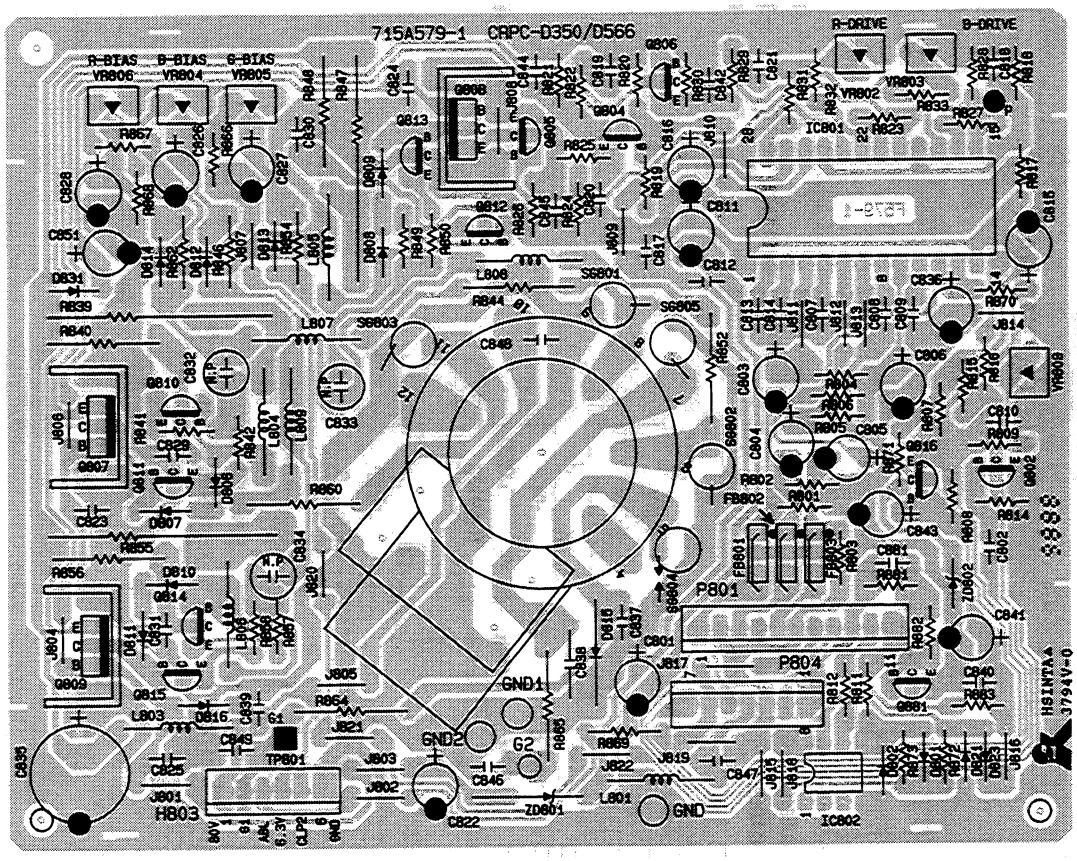
6 PCB LAYOUT

6-1 MAIN PCB LAYOUT

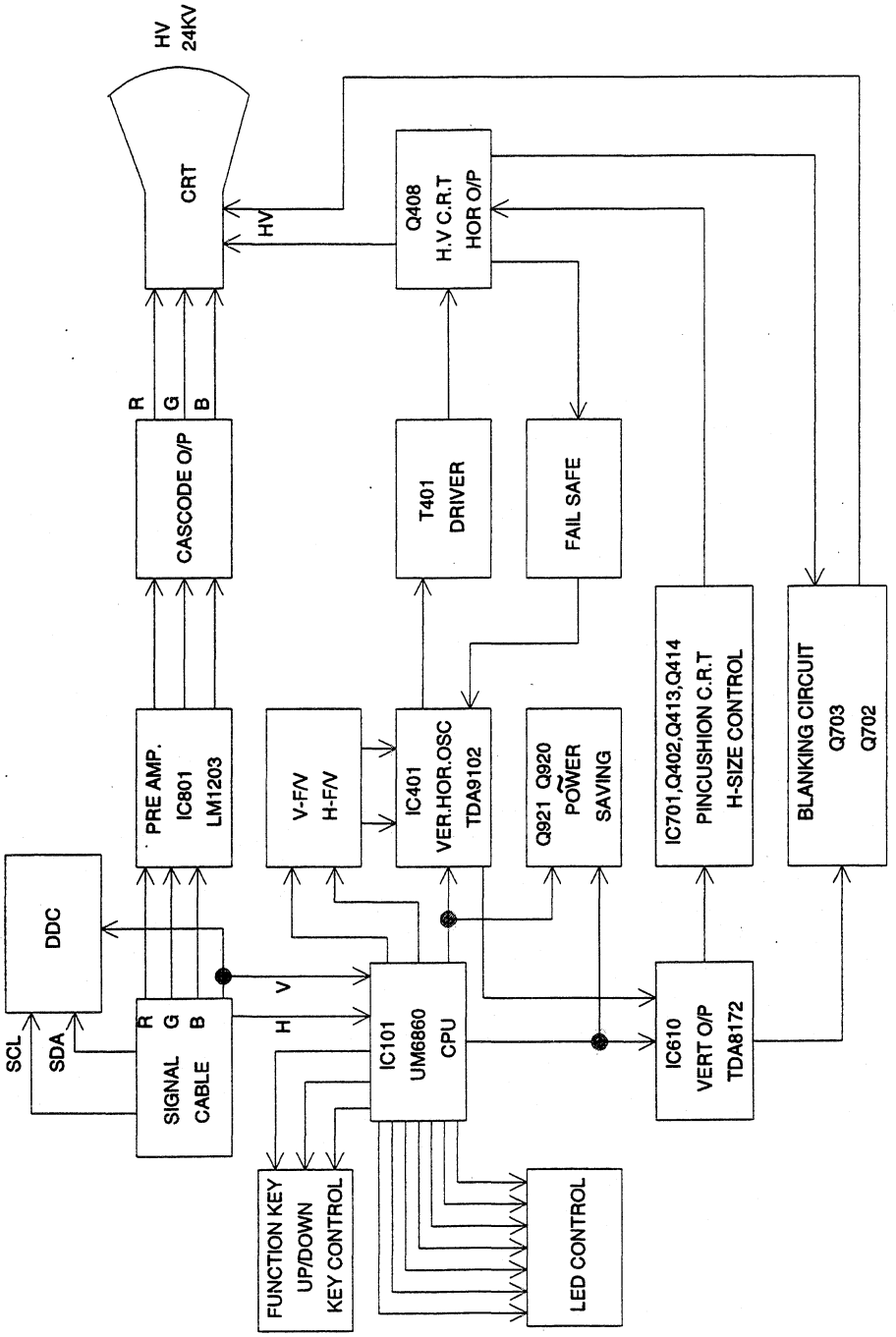


6-2 CRT BOARD LAYOUT

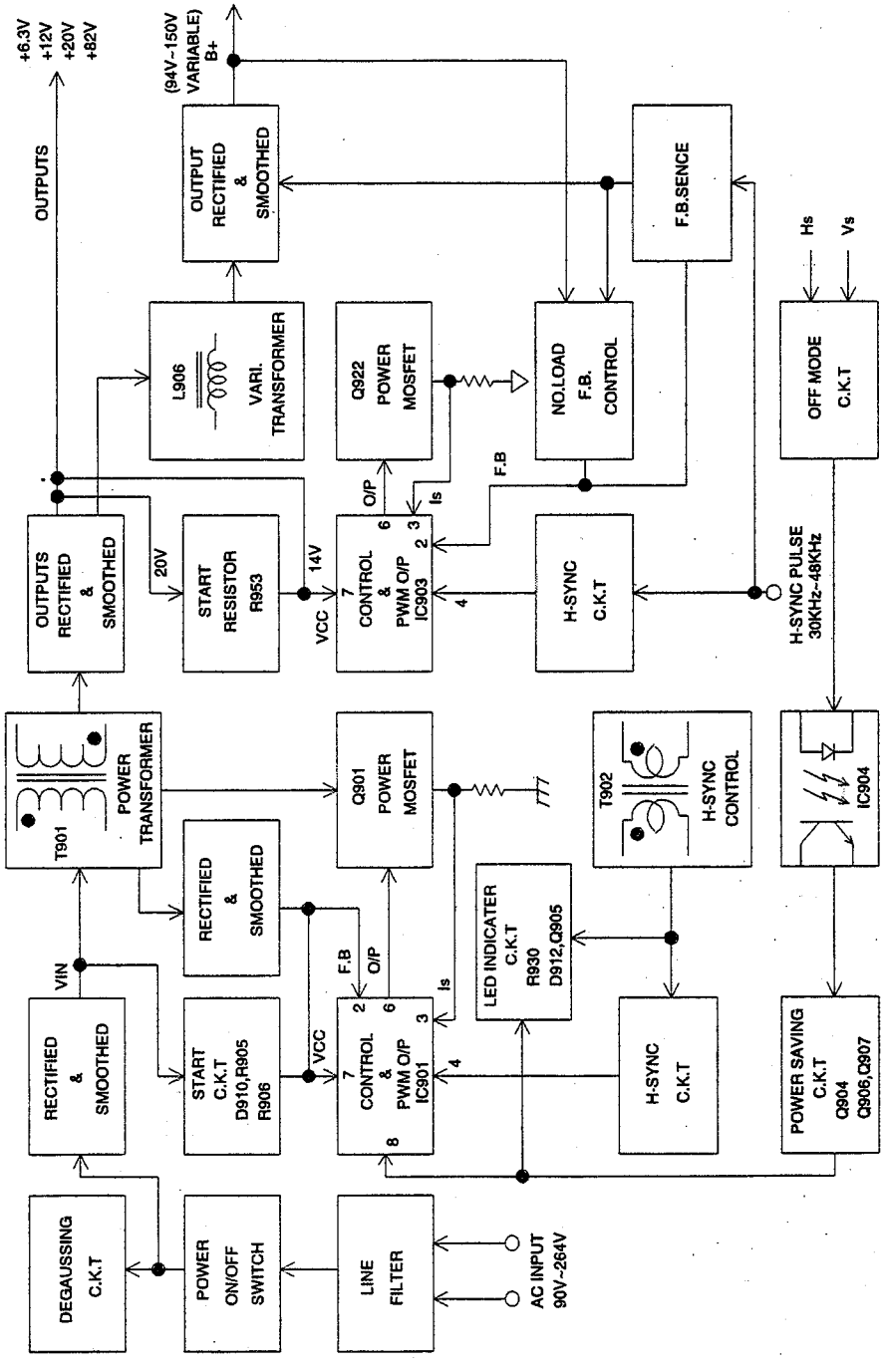
RESERVE FOR CRT BOARD LAYOUT PICTURE



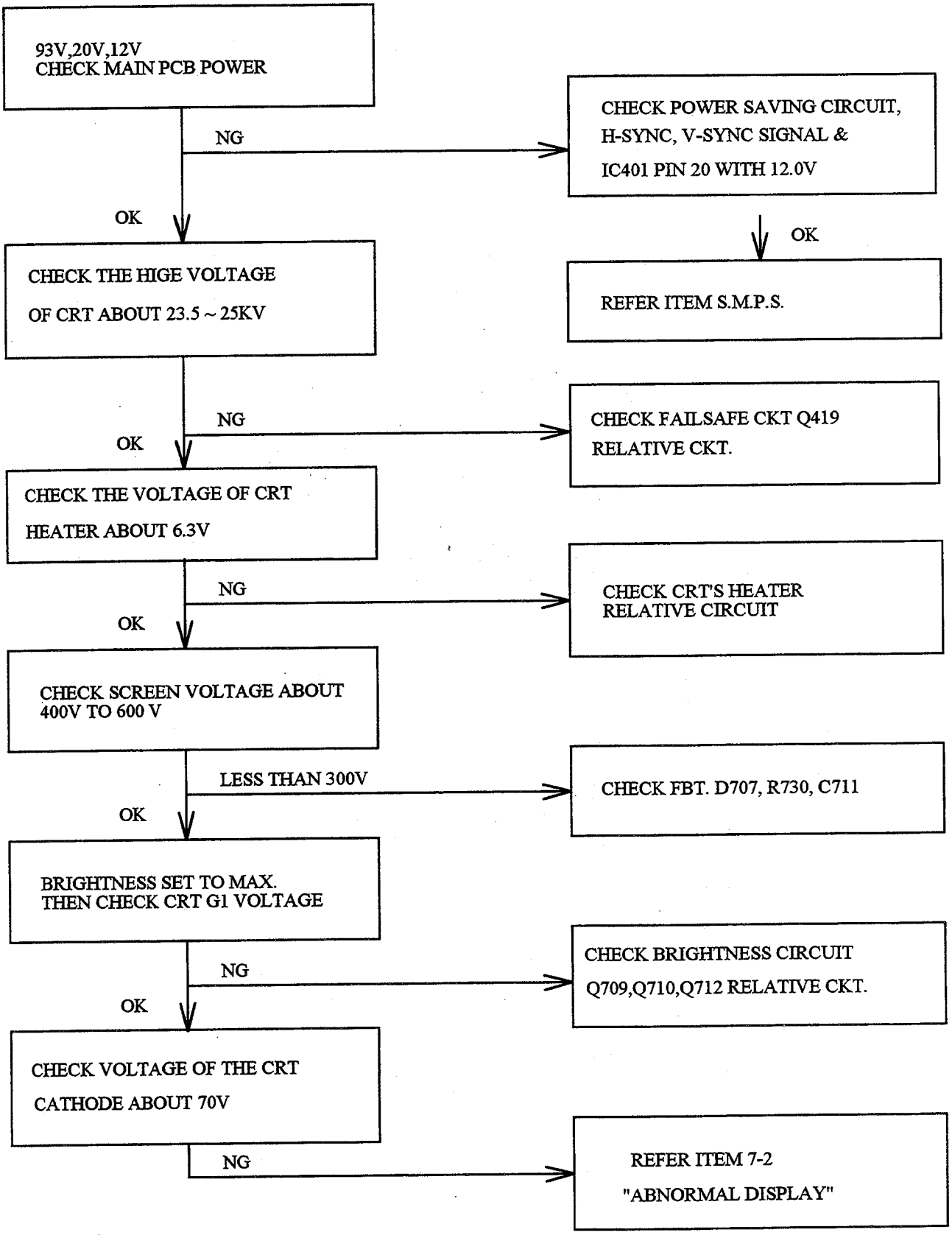
BLOCK DIAGRAM



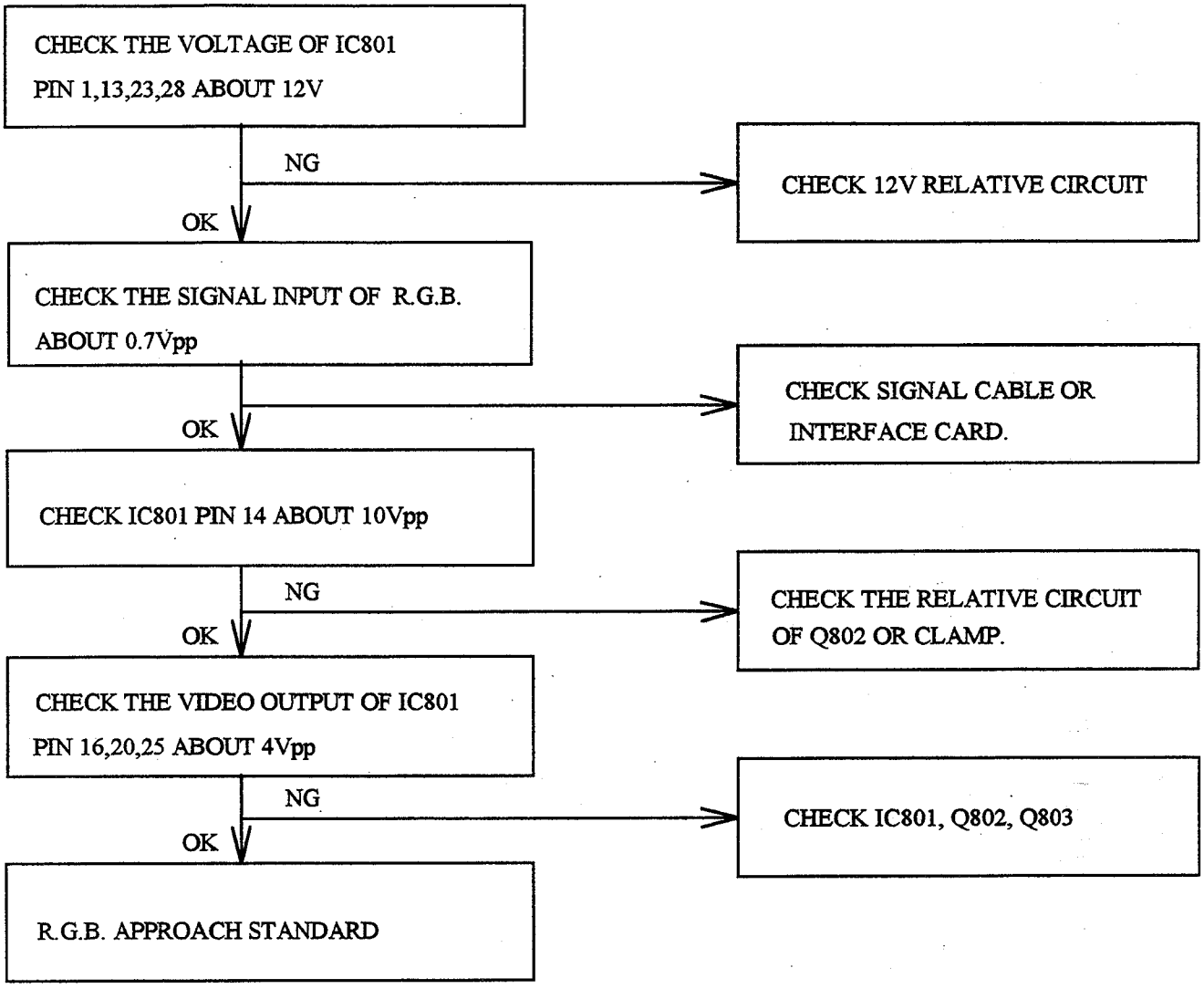
7-1 D350 BLOCK DIAGRAM (SMPS)



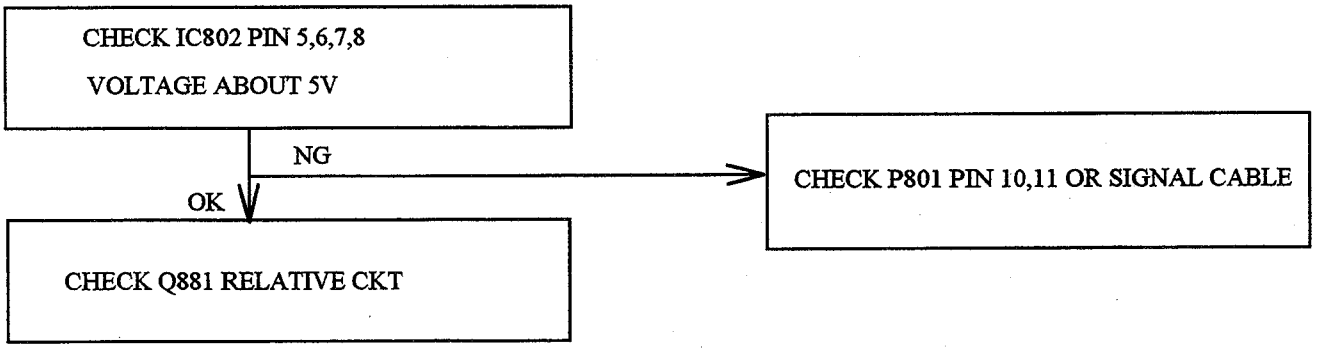
8.TROUBLE SHOOTING CHART
8-1 NO RASTER, CRT RELATIVE CIRCUIT PROBLEMS



2.ABNORMAL VIDEO LEVEL ON SCREEN

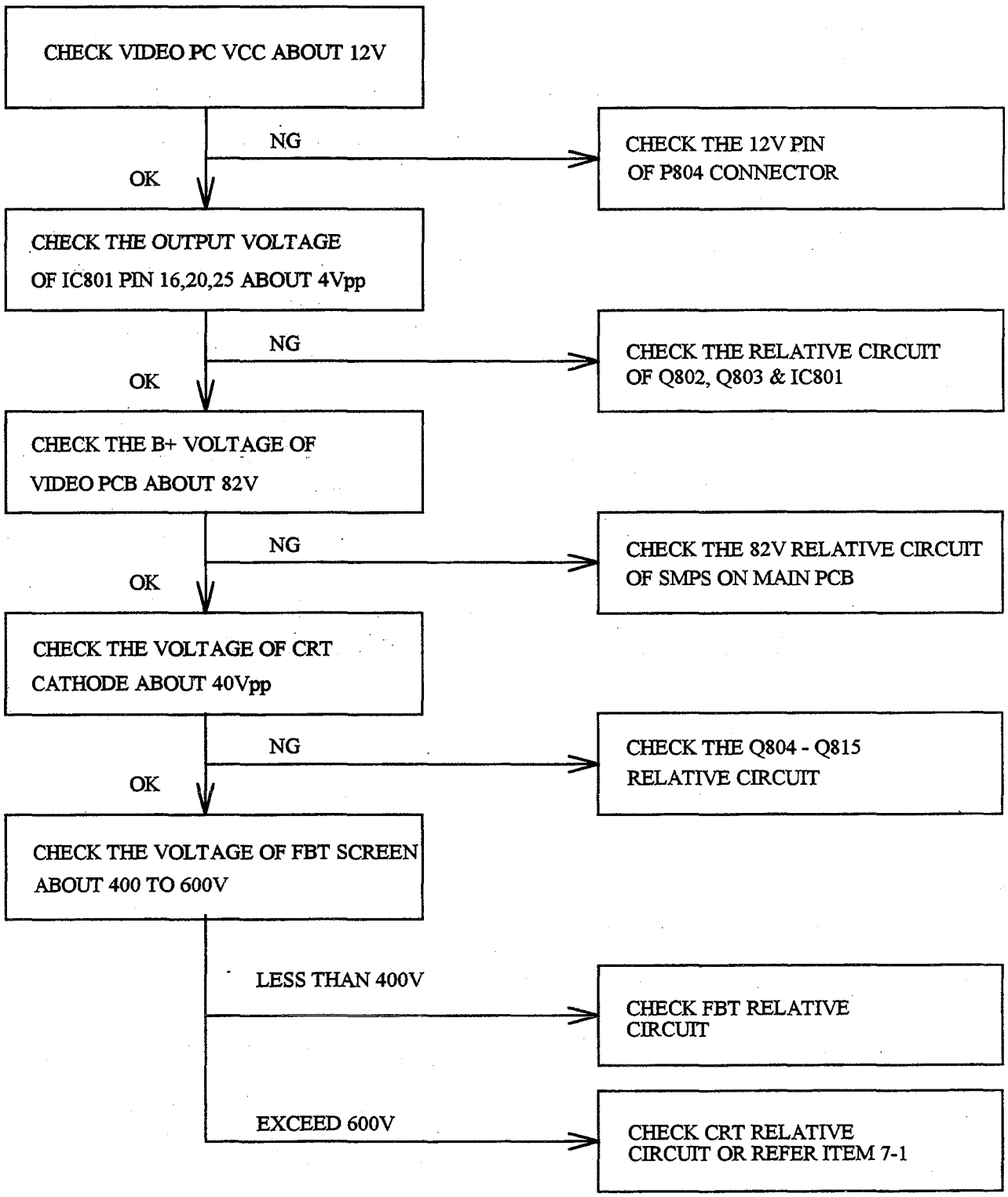


3. ABNORMAL DDC (PLUG & PLAY)

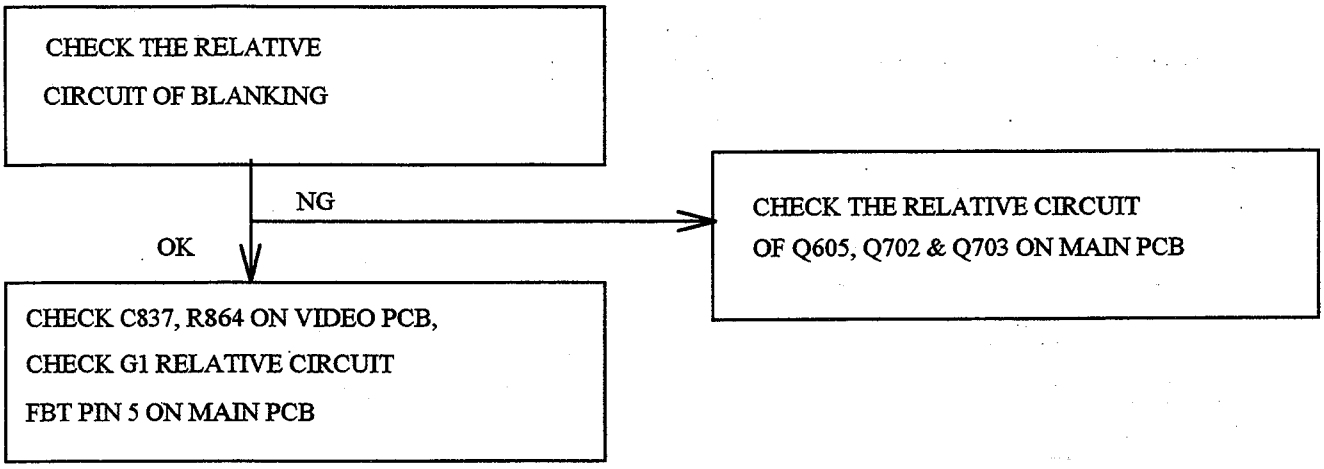


8-2 ABNORMAL DISPLAY

1.NO SIGNAL ON SCREEN

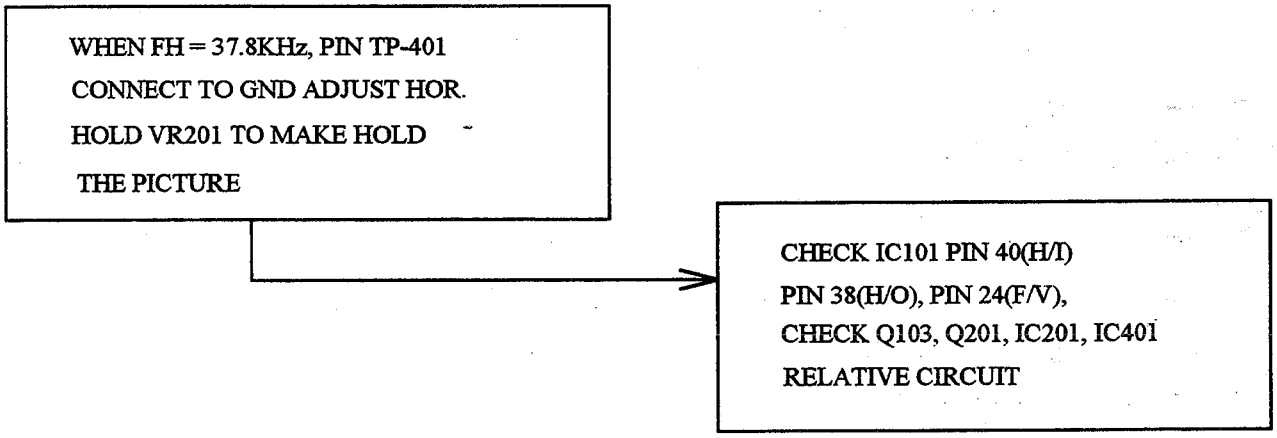

CHECK VIDEO PC VCC ABOUT 12V
NG
CHECK THE 12V PIN OF P804 CONNECTOR
OK
CHECK THE OUTPUT VOLTAGE OF IC801 PIN 16,20,25 ABOUT 4Vpp
NG
CHECK THE RELATIVE CIRCUIT OF Q802, Q803 & IC801
OK
CHECK THE B+ VOLTAGE OF VIDEO PCB ABOUT 82V
NG
CHECK THE 82V RELATIVE CIRCUIT OF SMPS ON MAIN PCB
OK
CHECK THE VOLTAGE OF CRT CATHODE ABOUT 40Vpp
NG
CHECK THE Q804 - Q815 RELATIVE CIRCUIT
OK
CHECK THE VOLTAGE OF FBT SCREEN ABOUT 400 TO 600V
LESS THAN 400V
CHECK FBT RELATIVE CIRCUIT
EXCEED 600V
CHECK CRT RELATIVE CIRCUIT OR REFER ITEM 7-1

8-3 NO BLANKING

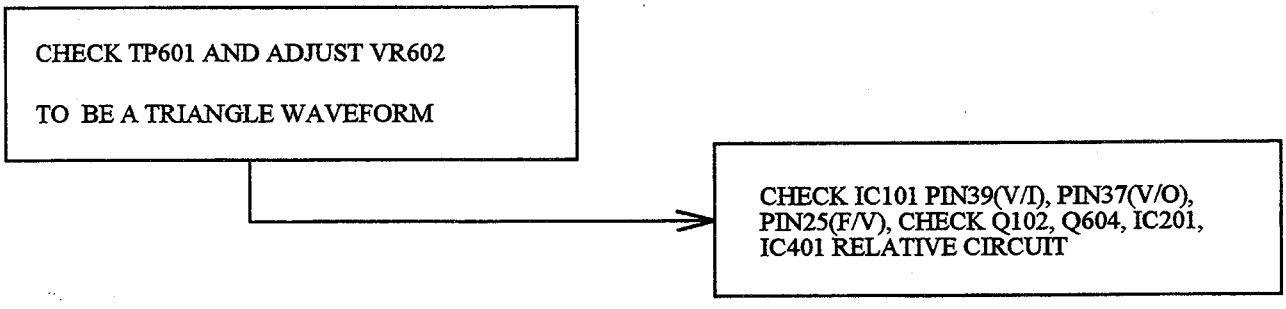

CHECK THE RELATIVE
CIRCUIT OF BLANKING
NG
OK
CHECK THE RELATIVE CIRCUIT
OF Q605, Q702 & Q703 ON MAIN PCB
CHECK C837, R864 ON VIDEO PCB,
CHECK G1 RELATIVE CIRCUIT
FBT PIN 5 ON MAIN PCB

8-4 VIDEO UNSTEADY

1. HORIZONTAL VIDEO UNSTABLE

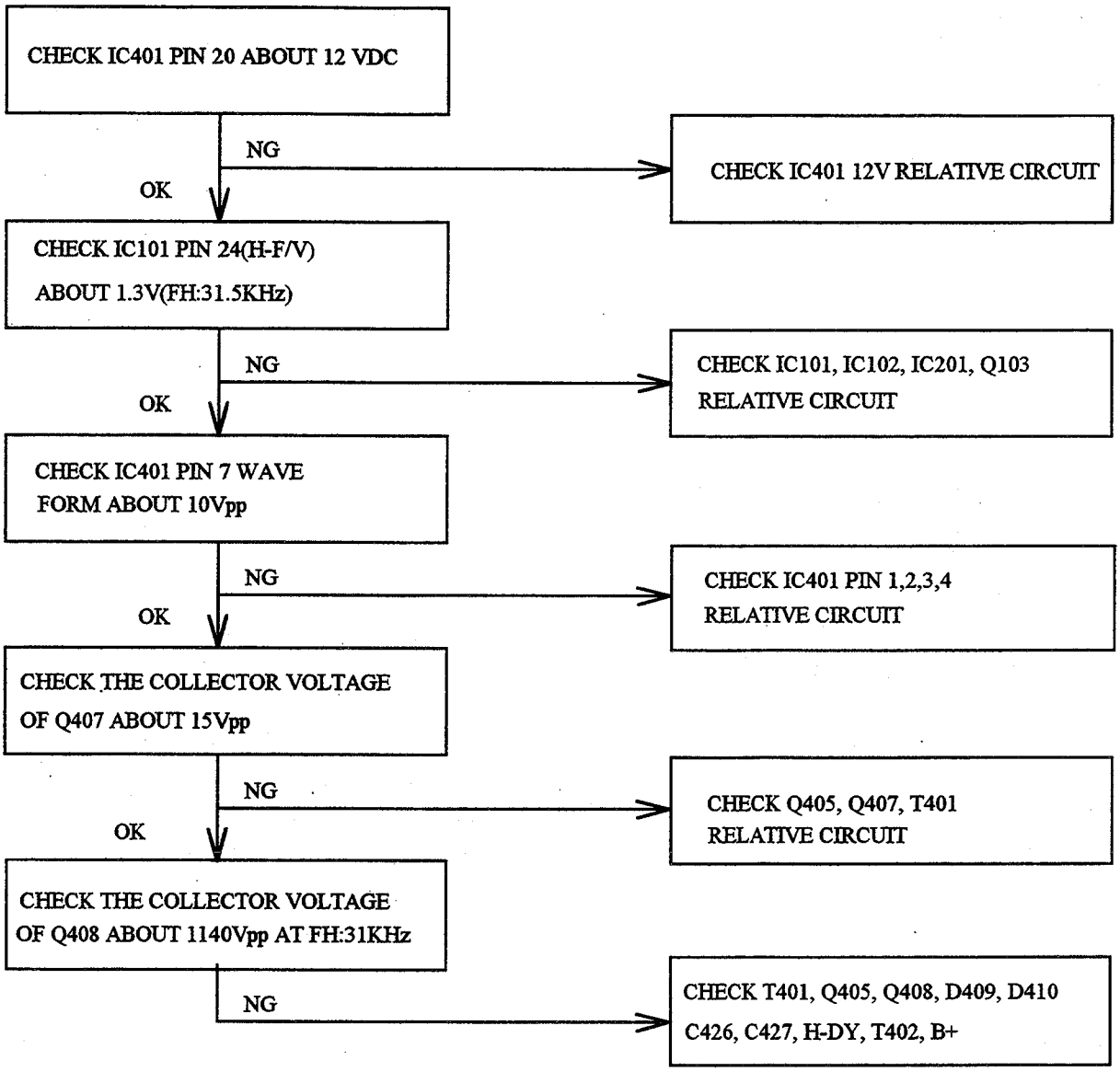

WHEN FH = 37.8KHz, PIN TP-401
CONNECT TO GND ADJUST HOR.
HOLD VR201 TO MAKE HOLD
THE PICTURE
CHECK IC101 PIN 40(H/I)
PIN 38(H/O), PIN 24(F/V),
CHECK Q103, Q201, IC201, IC401
RELATIVE CIRCUIT

2. VERTICAL VIDEO UNSTABLE


CHECK TP601 AND ADJUST VR602
TO BE A TRIANGLE WAVEFORM
CHECK IC101 PIN39(V/I), PIN37(V/O),
PIN25(F/V), CHECK Q102, Q604, IC201,
IC401 RELATIVE CIRCUIT

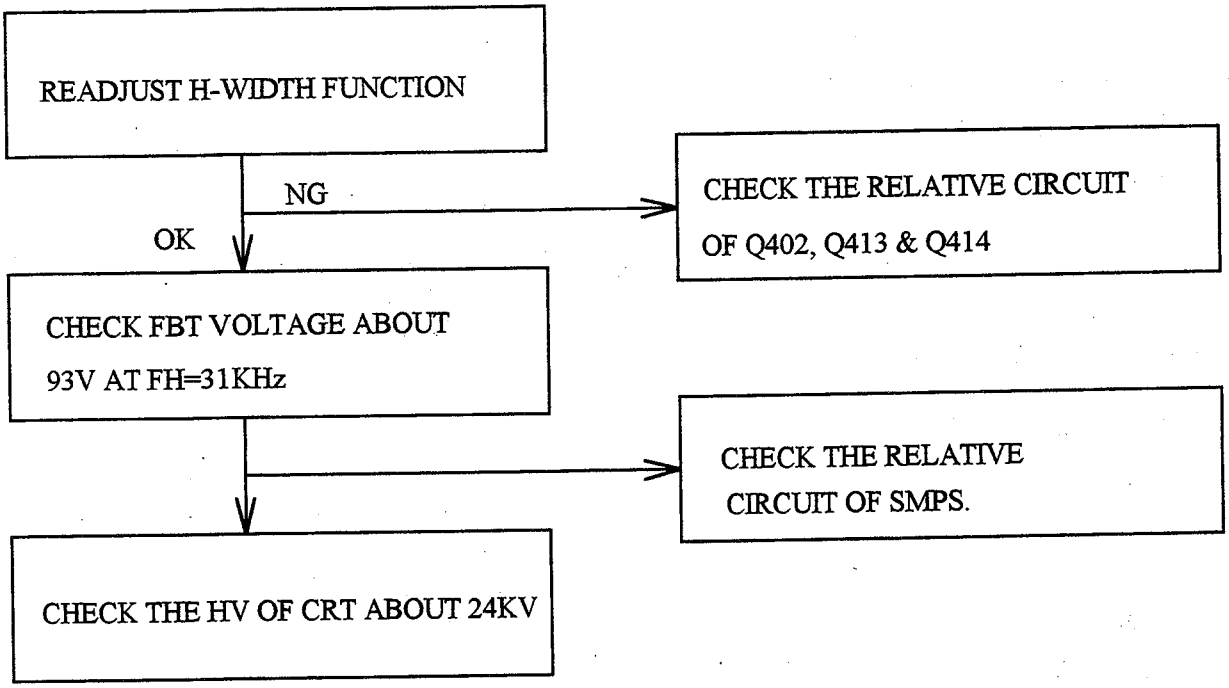
8-5 HOR./OSC/DEF/HV CIRCUIT FAULT

1. NO RASTER (DISCONNECT WITH SIGNAL CABLE)

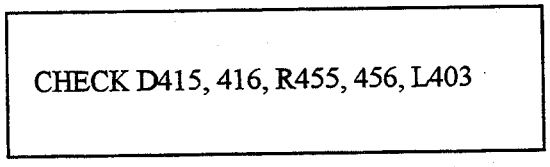


8-6 ABNORMAL HORIZONTAL DEFLECTION

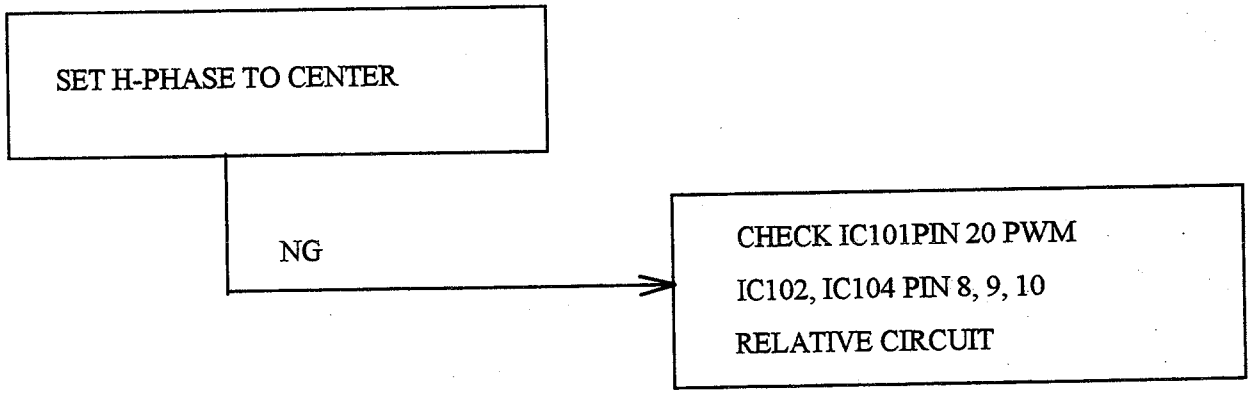
1. ABNORMAL HORIZONTAL WIDTH OF VIDEO



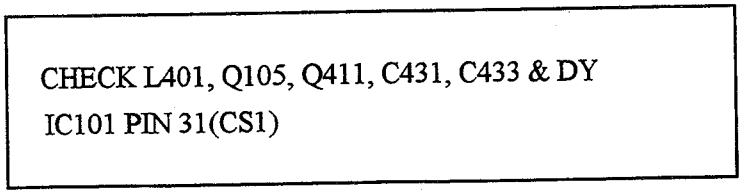
2. ABNORMAL HORIZONTAL RASTER CENTER



3. ABNORMAL HORIZONTAL VIDEO CENTER

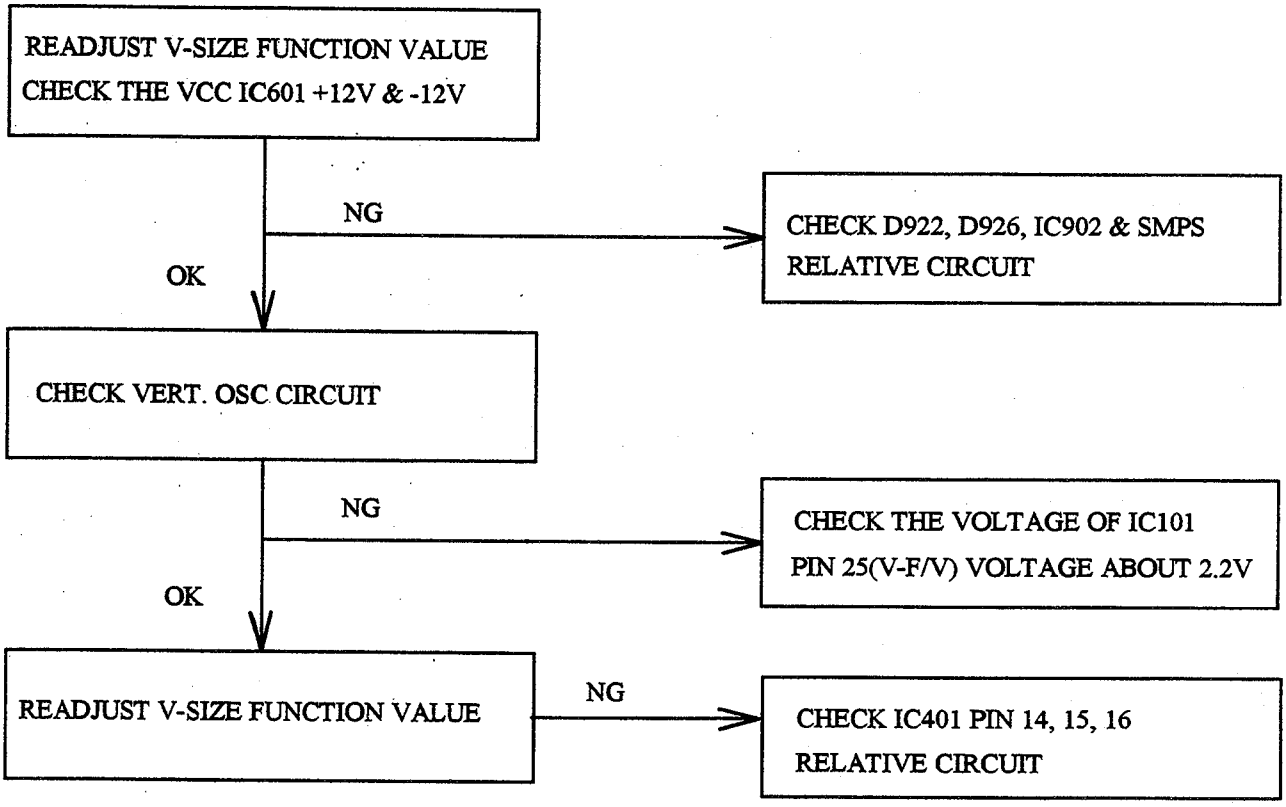


4. ABNORMAL HORIZONTAL LINEARITY

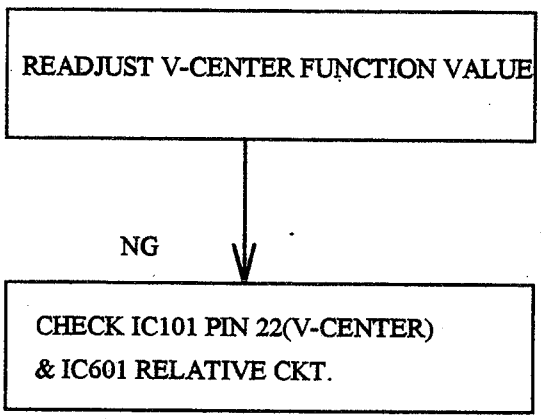


8-7 ABNORMAL VERTICAL SCANNING

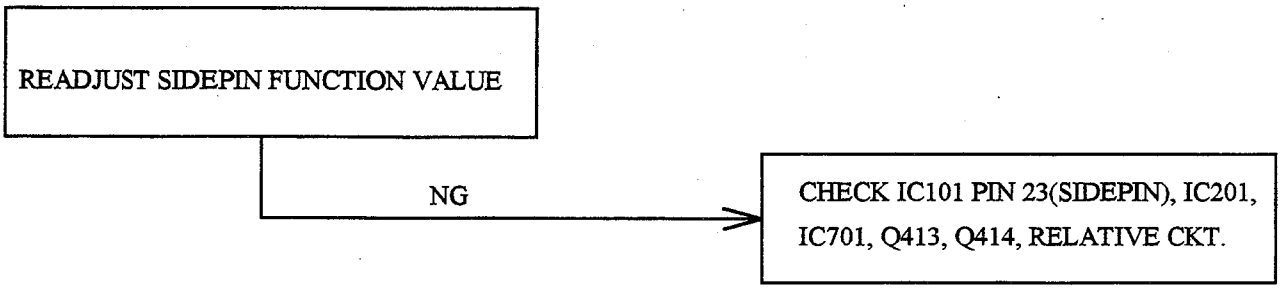
1. ABNORMAL VERTICAL SIZE



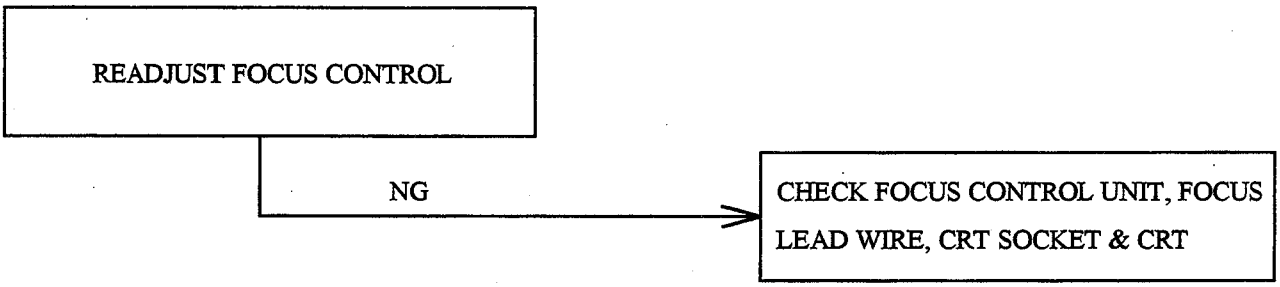
2. VERTICAL CENTER



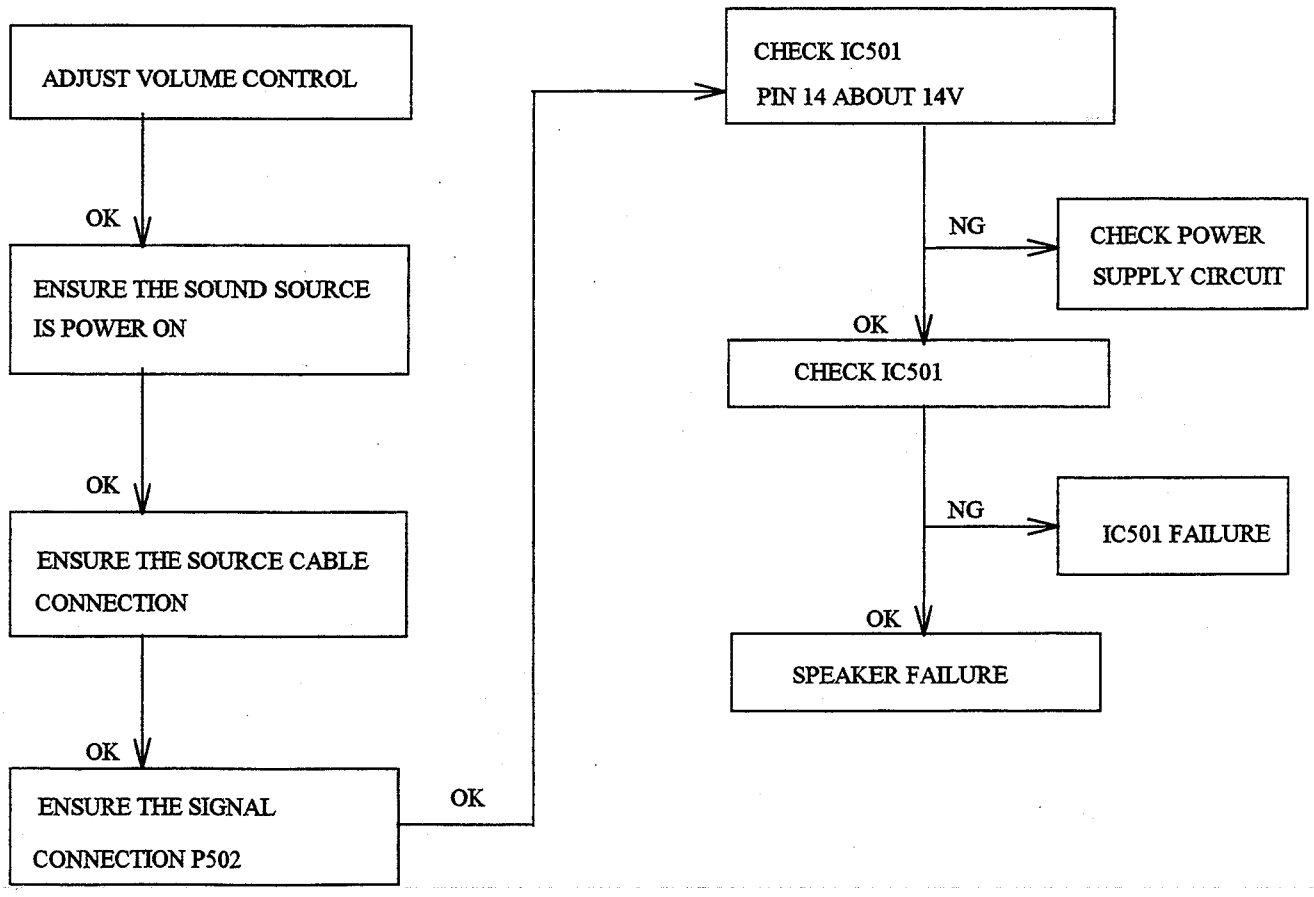
8-8 SIDE-PIN CUSHION DISTORTION



8-9 POOR FOCUS

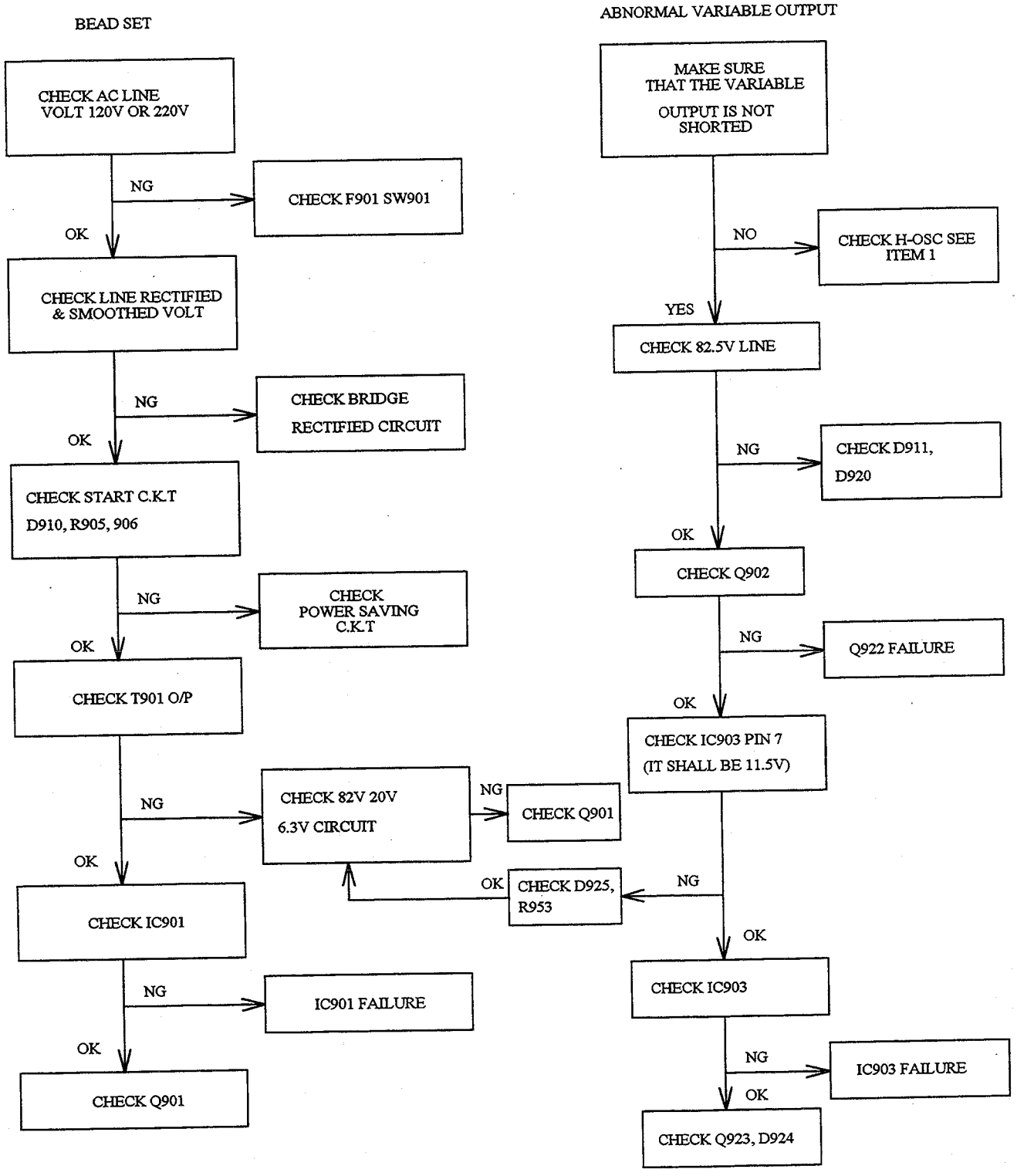


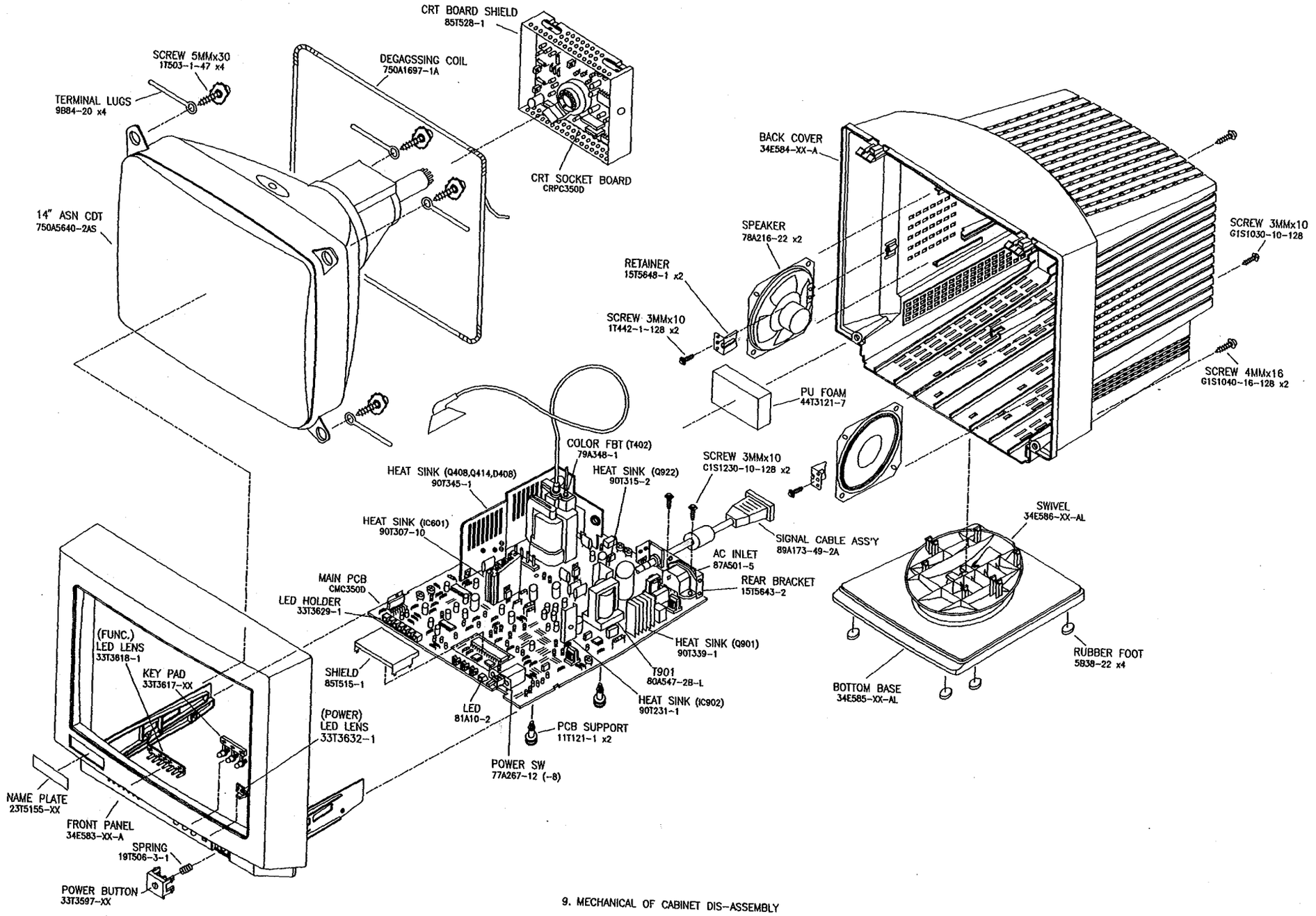
8-10 NO SOUND (FOR 4VA/4VlrA ONLY)



8-11 POWER SUPPLY TROUBLE SHOOTING CHART

BEFORE CHECK SW.REG. PLEASE REFER TO THE POWER SUPPLY BLOCK DIAGRAM
POWER SUPPLY OUTPUT: (A) VARIABLE OUTPUT : 90V - 160V
(DEPENDING UPON H.SYNC FREQUENCY)
(B) CONSTANT OUTPUT : 6.3V, 14.5V, 20V, 82.5V





9. MECHANICAL OF CABINET DIS-ASSEMBLY

PARTS LIST OF CABINET

LOCATION	D350JCWSP (LOW RADIATION 220V)	SPECIFICATION
	CMC350D	CHAS
	1A 421- 7- 128	SCREW
	1A 503- 1- 47	SCREW
	5A 38- 8	RUBBER WASHER
	9A 84- 20	STEEL
	9A 403- 5	STEEL
	11A 121- 1	MOUNT
	11A 123- 1	NYLON
	12A 6000- 2	RUBBER FOOT
	19A 403- 5	BUMPER STEEL
	19A 506- 3- 1	SPRING
	23T 3155- 106	PVC
	26A 800- 6	BAR-CODE
	33A 3597- 1	BASE
	33A 3598- 1	BASE
	33A 3617- 1	PCB HOOK
	33A 3618- 1	PS
	33A 3632- 1	LED LENS
	34A 583- 1- A	FRONT PANEL
	34A 584- 1- A	BACK COVER
	34A 585- 1- AL	BASE
	34A 586- 1- AL	SWIVEL
	40A 153- 58	CRT LABEL
	40A 154- 14	CABT LABEL
	40A 155- 005	ID LABEL
	40A 210- 44	ENERGY STAR LABEL
	40A 575- 37	GS LABEL
	40A 575- 41	X-RAY LABEL
	40A 575- 54	LABEL
	40A 590- 60	FTZ LABEL
	41A 68- 245	LIMITED WARRANTY
	41A 401- 850	OWNER'S AMNUAL
	44A 3121- 7	PU FOAM
	44A 3165- 1	EPS FOAM (L)
	44A 3165- 2	EPS FOAM (R)
	44T 3165- 4	CARTON
	45A 76- 28	POLY BAG
	45A 76- 31	POLY BAG
	45A 88- 1	PE BAG
	71A 303- 2	SPOILER
	71A 303- 2A	SPOILER
	85A 528- 1	SHIELD VIDEO
	89A 173- 56- 4	VIDEO CABLE
⚠	89A 498- 6	POWER CORD
	95A 91- 205- 1	WIRE
	95A 205- 50- 052	WIRE
	95A 205R- 30- 122	WIRE
	95A 205R- 30- 152	WIRE
	95A 205T- 50- 042	WIRE
	96A 29- 6- 450	TUBE
	G1A 1030- 10- 128	SCREW
	G1A 1040- 16- 128	SCREW
⚠	750A 1697- 1D	DEG COIL UL/CSA
	750A 5640-2A5	14" 0.28MM CDT

PARTS LIST OF CHAS

LOCATION	CMC350D	SPECIFICATION
	CMPC350DAI	MAIN PC BOARD
	CRPC350D	CRT BOARD
	1A 421- 7- 128	SCREW
	5A 42- 1	WASHER
	6A 31- 4	BRASS
	12A 372- 1	RUBBER
	15A 5640- 1	BRACKET
	15A 5643- 2	BRACKET
	19A 506- 3- 1	SUP4
	32A 3028- 8	MICA
	33A 3629- 1	LED HOLDER
	40A 154- 13	LABEL
	40A 581- 26- 011	BRANK LABEL
	71A 100- 7	BEAD
	85A 515- 1	SHIELD
⚠	84A 33- 10	FUSE
	87A 501- 5	AC INLET INALWAYS
	88A 302- 4	PHONE JACK
	89A 173- 49- 2A	CABLE
	90A 231- 1	HEAT SINK
	90A 307- 10	HEAT SINK
	90A 315- 2	HEAT SINK
	90A 339- 1	HEAT SINK
	90A 345- 1	HEAT SINK
	95A 800- 2- 2	WIRE
	96A 29- 6- 190	TUBING
	C1A 1130- 10- 128	SCREW
	Q1A 1035- 7- 128	SCREW
	N1A 330- 6- 128	SCREW
	N1A 330- 8- 128	SCREW
	N1A 330- 10- 128	SCREW
	N1A 330- 12- 128	SCREW
C201	67A 301- 478- 7	0.47uF +-20% 50V
C204	65A 450- 103- 3	0.01uF +80-20% Z5U 50V
C205	67A 309- 100- 7	10uF +-20% 50V
C407	64A 177- 17- 58	0.022uF J 50V
C408	64A 177- 15- 58	0.015uF J 50V
C409	95A 90- 23- A	WIRE
C413	67A 305- 471- 4	470uF +-20% 25V
C422	64A 176K- 222- 0TS	0.0022uF 10% 50/63V
C428	65A 517K- 471- 1A	470PF K Z5P 500V
C426	63A 210J- 472- 8DY	0.0047uF +-5% 2000V
⚠ C424	67A 301- 220- 9	0.0047uF +-5% 2000V
C427	63A 210J- 472- 5CY	0.0047uF +-5% 1KV
C431	63A 210J- 334- 3DC	0.33uF +-5% 400V
C433	63A 210J- 334- 2DC	0.33uF +-5% 250V
C442	63A 210J- 154- 2BC	0.15uF +-5% 250V
C444	63A 210J- 684- 2DC	0.68uF +-5% 250V
C447	67A 201- 100- 11	10uF +-20% 200V
C450	65A 450- 103- 3	0.01uF +80-20 % Z5U 50V
C606	64A 177- 15- 58	0.015uF J 50V
C607	67A 305- 331- 4	330uF +-20% 25V
C616	67A 305- 102- 4	1000uF +-20% 25V
C620	64A 177- 19- 58	0.033uF J 50V
C622	67A 305- 471- 3	470uF +-20% 16V
C707	65A 517K- 222- 1A	2200PF K Z5P 500V
C711	67A 201- 220- 11	22uF +-20% 200V
C902	63A 107- 224- 3	0.22uF +-20% 250V
C922	67A 305- 470- 7	47uF +-20% 50V

LOCATION	CMC350D				SPECIFICATION
C900	65A	305M-	472-	2B	4700PF +-20% 400VAC
C903	65A	305M-	472-	2B	4700PF +-20% 400VAC
C904	65A	305M-	472-	2B	4700PF +-20% 400VAC
C905	63A	107-	104-	4	0.1uF +-20% 250V
C906	65A	305M-	102-	2E	1000PF +-20% 400V
C907	67A	30-	151-	14	150uF +-20% 400V
C908	65A	1M-	103-	3B	0.01nF +-20% Z5U 1KV
C916	67A	2K-	101-	5A	100PF +-10% 2KV
C930	67A	305-	102-	4	1000uF +-20% 25V
C931	67A	305-	471-	4	470uF +-20% 25V
C933	67A	305-	102-	4	1000uF +-20% 25V
C934	67A	309-	102-	3	1000uF +-20% 16V
C935	67A	305-	102-	2	1000uF +-20% 20V
C936	67A	305-	101-	10	100uF +-20% 160V
C937	67A	309-	470-	10	47uF +-20% 160V
C938	67A	305-	102-	4	1000uF +-20% 25V
C939	67A	305-	471-	4	470uF +-20% 25V
C940	67A	309-	471-	3	470uF +-20% 16V
C941	67A	309-	220-	7	22uF +-20% 50V
C942	65A	442-	561-	9	560PF J SL 50V
C944	67A	305-	470-	11	47uF +-20% 50V
C950	65A	2M-	221-	3A	220PF M Z5U 2KV
C955	65A	517K-	561-	2A	560PF K Z5P 500V
CN901	87A	501-	5		AC SOCKET
CN902	33A	3074-	1		2P PLUG
D409	93A	2140-	1		2A/1400V BYM26G/PHILIPS
D410	93A	3060-	2		F R D BYM36C/PHILIPS
D417	93A	60-	38		1A 200V FR103
D910	93A	52-	1		1A 600V RG1004/IN4005
D920	93A	60-	73A		F R D 3A/400V
D921	93A	2020-	1		F R D 200V/2.4A
D922	93A	2020-	1		F R D 200V/2.4A
D923	93A	3020-	2		F R D BYW98-200
D924	93A	2020-	1		F R D 200V/2.4A
D926	93A	2020-	1		F R D 200V/2.4A
F901	84A	7-	45		FUSE 2.5A 250V
FB501	71A	55-	9		BEAD
FB920	71A	55-	2		BEAD
FB922	71A	55-	2		BEAD
H101	95A	8013-	4-	7	WIRE
H804	95A	8013-	7-	1	WIRE
IC101	56A	1125-	4		40P CPU UM6860
IC102	56A	1133-	3		8P 24LC02B
IC201	56A	212-	2		14P IC LM324N/SG
IC601	56A	533-	1		VERT OUT IC TDA8172
IC701	56A	505-	2		14P IC TDA8145/S.T.
IC902	56A	133-	12		3P 12V REGULATOR 7812
IC401	56A	326-	2		28P IC LA7851/SANYO
IC901	56A	379-	9		8P IC KA3842A
IC903	56A	379-	11		8P IC SG3842M
IC904	56A	139-	2		4P IC SFH617G-2/SIEMENS
JAA	95A	202-	59-	082	WIRE
JBB	95A	202-	59-	032	WIRE
JCC	95A	202-	59-	032	WIRE
JDD	95A	202-	59-	042	WIRE
L401	73A	147-	48		COIK
L403	73A	253-	53		400uH+-10%
L404	73A	253-	72		200uH+-5% 3.5A
L405	73A	253-	70		1.5mH+-5% 0.3A
L902	73A	173-	2		3MH
L903	73A	259-	4		200UH+-5%
NR901	61A	58-	5		5 OHM+-20%

LOCATION	CMC350D	SPECIFICATION
L901	73A 174- 2	25MH MIN.
L904	73A 259- 2	30UH +-15%
L905	73A 259- 2	30UH +-15%
L906	73A 253- 68	180UH +-10%
LED1	81A 10- 2	H410YG2PT
LED2	81A 2- 3- 2	CSL-310G3GT/BY
LED3	81A 2- 3- 2	CSL-310G3GT/BY
LED4	81A 2- 3- 2	CSL-310G3GT/BY
LED5	81A 2- 3- 2	CSL-310G3GT/BY
LED6	81A 2- 3- 2	CSL-310G3GT/BY
LED7	81A 2- 3- 2	CSL-310G3GT/BY
LED8	81A 2- 3- 2	CSL-310G3GT/BY
P101	33A 3278- 4	4PIN PLUG
P401	33A 3252- 2	3PIN PLUG
P402	33A 3192- 4	4PIN PLUG
P405	33A 8009- 3	3PIN PLUG
P803	33A 3278- 6	6PIN PLUG
⚠ PR901	61A 52- 22- 3	14 OHM PTCR 220VAC
⚠ Q407	57A 521- 1	TR. 2SD667/HITACHI
⚠ Q408	57A 689- 1	TR. 2SC4769
Q411	57A 600- 2	TR.IRF630/SAMSUNG
Q412	57A 600- 2	TR.IRF630/SAMSUNG
Q414	57A 687- 3	H2N6718V
Q419	57A 566- 1	TR. 2N5060/MOTORLA
Q920	57A 690- 1	TR.2SB649A
⚠ Q901	56A 667- 5	STP7NA60
Q922	57A 600- 3	IRF620/S.T
R416	61A 153M- 333- 59	33K OHM +-5% 3W
R437	61A 155M- 121- 61	120 OHM +-5% 5W
R440	61A 208- 109- 64	10 OHM +-5% 1W
R442	61A 152M- 391- 64	390 OHM +-5% 2W
R455	61A 152M- 101- 64	100 OHM +-5% 2W
R456	61A 152M- 101- 64	100 OHM +-5% 2W
R624	61A 208- 109- 64	10 OHM +-5% 1W
R625	61A 208- 109- 64	10 OHM +-5% 1W
R626	61A 208- 338- 64	0.33 OHM +-5% 1W
R628	61A 208- 109- 64	10 OHM +-5% 1W
R946	61A 20K- 478- GB1	0.47 OHM +-10% 2W
⚠ R902	61A 51- 129- 67	1.2 OHM +-5% 5W
⚠ R904	61A 303- 228- 64	0.22 OHM +-5% 1W
⚠ R905	61A 153M- 333- 59	33K OHM +-5% 3W
⚠ R907	61A 153M- 333- 59	33K OHM +-5% 3W
⚠ R908	61A 20K- 478- GB1	0.47 OHM +-10% 2W
R946	61A 20K- 338- GB1	0.33 OHM +-10% 2W
R956	61A 301- 228- 64	0.22 OHM +-5% 1/2W
SW101	71A 602- 1	TACT SWITCH
SW102	71A 602- 1	TACT SWITCH
SW103	71A 602- 1	TACT SWITCH
SW901	77A 267- 12	PWR SW SPST 5A/250V
⚠ T401	79A 167- 22E	DRIVER XFMR
⚠ T402	79A 348- 1	XFMR
⚠ T901	80A 547- 2B- L	ERL35 SW XFMR
⚠ VR401	75A 327A- 103- 52G	10K OHM +-20% DETENT
T902	79A 168- 2A	L=150uH +-25%
TP401	9A 211- 2	PIN
TP601	9A 211- 2	PIN
TP901	9A 211- 2	PIN
TP902	9A 211- 2	PIN
TP903	9A 211- 2	PIN
VR201	75A 334- 103	10K OHM +-30%
VR602	75A 334- 103	10K OHM +-30%

LOCATION	CMC350D	SPECIFICATION
VR704	75A 335- 473	47K OHM +-30%
VR901	75A 335- 101	100K OHM +-30%
VR903	75A 335- 102	1K OHM +-30%
X101	93A 22- 22	8.0000 MHZ/S.P.K.
ZD901	93A 39- 52	5.1V +-5% 0.5W HZ5C2/RD5.1EB3
ZD903	93A 39- 94	RD18EB1 NEC
ZD904	93A 39- 109	1.88-2.10V DIODE RD2.0EB1/NEC
ZD920	93A 39- 130	ZD RD18EB2/NEC
ZD921	93A 39- 59	4.2V +-2.5% 0.5W HZ4C-2

PARTS LIST OF MAIN PC BOARD

LOCATION	CMPC350DAI	SPECIFICATION
	7 15A 578- 1	P.C.B.
C101	67A 309- 101- 4T	100uF +-20% 25V
C102	65A 450- 104- 7T	0.1uF +80-20% 50V
C103	65A 450- 104- 7T	0.1uF +80-20% 50V
C105	65A 442- 470- 13T	47PF +-5% NPO 50V
C106	65A 442- 220- 13T	22PF +-5% NPO 50V
C107	67A 309- 470- 7T	47uF +-20% 50V
C112	67A 309- 100- 7T	10uF +-20% 50V
C113	67A 309- 229- 7T	2.2uF +-20% 50V
C114	67A 309- 109- 7T	1uF +-20% 50V
C118	67A 305- 229- 7T	2.2uF +-20% 50V
C120	67A 305- 229- 7T	2.2uF +-20% 50V
C122	67A 301- 229- 7T	2.2uF +-20% 50V
C123	67A 309- 109- 7T	1uF +-20% 50V
C124	67A 309- 109- 7T	1uF +-20% 50V
C128	67A 309- 109- 7T	1uF +-20% 50V
C202	67A 309- 220- 7T	22uF +-20% 50V
C203	65A 450- 104- 7T	0.1uF +80-20% 50V
C211	67A 305- 229- 7T	2.2uF +-20% 50V
C212	67A 305- 229- 7T	2.2uF +-20% 50V
C401	64A 45G- 102-1AT	0.001uF +-2% 50V
C402	67A 309- 109- 7T	1uF +-20% 50V
C403	64A 45G- 332-1AT	0.0033uF +-2% 50V
C404	65A 442- 470- 13T	47PF J NPO 50V
C405	65A 442- 470- 13T	47PF J NPO 50V
C406	65A 442- 220- 13T	22PF J NPO 50V
C410	67A 309- 101- 4T	100uF +-20% 25V
C411	67A 309- 100- 7T	10uF +-20% 50V
C412	65A 450- 104- 7T	0.1uF +80-20% 50V
C423	67A 309- 109- 10T	1.0uF +-20% 160V
C425	64A 176J- 154- 0T	0.15uF 5% 50/63V
C436	65A 444- 332- 5T	3300 PF 10% 50V Y5P
C439	65A 444- 103- 5T	0.01 uF 10% 50V Y5P
C445	65A 444- 103- 5T	0.01 uF 10% 50V Y5P
C448	65A 450- 104- 7T	0.1uF +80-20% 50V
C449	65A 450- 104- 7T	0.1uF +80-20% 50V
C603	64A 176J- 224- 1T	0.22uF 5% 100V
C604	67A 309- 109- 7T	1uF +-20% 50V
C605	64A 177- 15- 58T	0.015 uF +-5% 50V
C609	67A 309- 100- 7T	10uF +-20% 50V
C610	67A 309- 109- 7T	1uF +-20% 50V
C614	64A 176K- 103- 0TS	0.01uF 10% 50/63V
C615	64A 176K- 104- 0TS	0.1uF 10% 63V
C617	64A 176K- 104- 0TS	0.1uF 10% 63V
C618	67A 309- 101- 4T	100uF +-20% 25V
C619	64A 176J- 104- 0TS	0.1uF 5% 50/63V
C623	64A 176J- 104- 0TS	0.1uF 5% 50/63V

LOCATION	CMPC350DAI	SPECIFICATION
C701	65A 444- 472- 5T	4700P uF 10% 50V Y5P
C702	67A 309- 220- 7T	22uF +-20% 50V
C703	65A 444- 332- 5T	3300P uF 10% 50V Y5P
C704	67A 305- 229- 7T	2.2uF +-20% 50V
C706	65A 517K- 471- 2T	470PF 10% Z5P 500V
C708	67A 309- 228- 7T	0.22uF +-20% 50V
C710	64A 176J- 224- 1T	0.22uF 5% 100V
C714	67A 301- 108- 10T	0.1uF +-20% 160V
C715	67A 309- 101- 4T	100uF +-20% 25V
C716	67A 309- 100- 7T	10uF +-20% 50V
C717	65A 442- 121- 13T	120PF +-5% NPO 50V
C909	67A 305- 101- 4T	100uF +-20% 25V
C910	64A 176J- 102- 0T	0.001uF 10% 50/63V
C912	64A 176J- 332- 0T	0.0033uF 5% 50/63V
C913	64A 176J- 102- 0T	0.001uF 5% 50/63V
C914	64A 176J- 104- 0T	0.1uF 5% 50/63V
C915	67A 305- 220- 7T	22uF +-20% 50V
C917	64A 176J- 104- 1T	0.1uF 5% 100V
C918	67A 309- 109- 7T	1uF +-20% 50V
C919	67A 309- 100- 7T	10uF +-20% 50V
C920	64A 176J- 104- 0T	0.1uF 5% 50/63V
C921	67A 309- 229- 7T	2.2uF +-20% 50V
C932	67A 309- 229- 7T	2.2uF +-20% 50V
C943	64A 176J- 104- 0T	0.1uF 5% 50/63V
C945	64A 176J- 222- 0T	2200PF 5% 50/63V
C946	64A 176J- 102- 0T	1000PF 5% 50/63V
C947	64A 176J- 332- 0T	0.0033uF 5% 50/63V
C948	64A 176J- 103- 0T	0.01uF 5% 50/63V
C949	64A 176J- 103- 0T	0.01uF 5% 50/63V
C951	64A 176J- 473- 2T	0.047uF 5% 200/250V
C952	64A 176J- 223- 0T	0.022uF 5% 50/63V
C953	67A 309- 229- 7T	2.2uF +-20% 50V
D102	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D103	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D104	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D105	95A 90- 23- A	TIN COATED
D109	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D110	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D111	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D112	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D113	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D201	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D202	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D403	93A 60- 21- 52T	FRD 1.5A 500V
D404	93A 64- 11H- 52T	DIODE IN4148/NS
D406	93A 64- 11H- 52T	DIODE IN4148/NS
D407	93A 60- 21- 52T	FRD 1.5A 500V
D408	93A 60- 21- 52T	FRD 1.5A 500V
D412	93A 60- 21- 52T	FRD 1.5A 500V
D414	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D415	93A 60- 21- 52T	FRD 1.5A 500V
D416	93A 60- 21- 52T	FRD 1.5A 500V
D418	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D419	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D420	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D601	93A 52- 47- 52T	DIODE IN4004/FAG
D602	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D661	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D707	93A 60- 21- 52T	FRD 1.5A 500V
D708	93A 64- 11H- 52T	DIODE IN4148/HITACHI
⚠ D901	93A 52- 9- 52T	2A 600V
D902	93A 52- 9- 52T	2A 600V
D903	93A 52- 9- 52T	2A 600V
D904	93A 52- 9- 52T	2A 600V

LOCATION	CMPC350DAI	SPECIFICATION
D905	93A 60- 21- 52T	FRD 1.5A 500V
D906	93A 60- 31- 52T	BAV20/IIT
D907	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D908	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D909	93A 60- 31- 52T	BAV20/IIT
D911	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D912	93A 60- 31- 52T	BAV20/IIT
D913	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D918	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D919	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D925	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D927	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D928	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D929	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D930	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D931	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D933	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D936	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D937	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D938	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D939	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D940	93A 64- 11H- 52T	DIODE IN4148/HITACHI
D941	93A 60- 21- 52T	FRD 1.5A 500V
FB901	95A 90- 23- A	TIN COATED
FB902	95A 90- 23- A	TIN COATED
J001	95A 90- 23- A	TIN COATED
J002	95A 90- 23- A	TIN COATED
J003	95A 90- 23- A	TIN COATED
J004	95A 90- 23- A	TIN COATED
J005	95A 90- 23- A	TIN COATED
J006	95A 90- 23- A	TIN COATED
J007	95A 90- 23- A	TIN COATED
J008	95A 90- 23- A	TIN COATED
J009	95A 90- 23- A	TIN COATED
J010	95A 90- 23- A	TIN COATED
J0101	95A 90- 23- A	TIN COATED
J011	95A 90- 23- A	TIN COATED
J012	95A 90- 23- A	TIN COATED
J013	95A 90- 23- A	TIN COATED
J014	95A 90- 23- A	TIN COATED
J015	95A 90- 23- A	TIN COATED
J016	95A 90- 23- A	TIN COATED
J017	95A 90- 23- A	TIN COATED
J018	95A 90- 23- A	TIN COATED
J019	95A 90- 23- A	TIN COATED
J020	95A 90- 23- A	TIN COATED
J021	95A 90- 23- A	TIN COATED
J022	95A 90- 23- A	TIN COATED
J023	95A 90- 23- A	TIN COATED
J024	95A 90- 23- A	TIN COATED
J025	95A 90- 23- A	TIN COATED
J026	95A 90- 23- A	TIN COATED
J027	95A 90- 23- A	TIN COATED
J028	95A 90- 23- A	TIN COATED
J029	95A 90- 23- A	TIN COATED
J030	95A 90- 23- A	TIN COATED
J031	95A 90- 23- A	TIN COATED
J032	95A 90- 23- A	TIN COATED
J033	95A 90- 23- A	TIN COATED
J034	95A 90- 23- A	TIN COATED
J035	95A 90- 23- A	TIN COATED
J036	95A 90- 23- A	TIN COATED

LOCATION	CMPC350DAI				SPECIFICATION
J037	95A	90-	23-	A	TIN COATED
J038	95A	90-	23-	A	TIN COATED
J039	95A	90-	23-	A	TIN COATED
J040	95A	90-	23-	A	TIN COATED
J041	95A	90-	23-	A	TIN COATED
J042	95A	90-	23-	A	TIN COATED
J043	95A	90-	23-	A	TIN COATED
J044	95A	90-	23-	A	TIN COATED
J045	95A	90-	23-	A	TIN COATED
J046	95A	90-	23-	A	TIN COATED
J047	95A	90-	23-	A	TIN COATED
J048	95A	90-	23-	A	TIN COATED
J049	95A	90-	23-	A	TIN COATED
J050	95A	90-	23-	A	TIN COATED
J051	95A	90-	23-	A	TIN COATED
J052	95A	90-	23-	A	TIN COATED
J053	95A	90-	23-	A	TIN COATED
J054	95A	90-	23-	A	TIN COATED
J056	95A	90-	23-	A	TIN COATED
J057	95A	90-	23-	A	TIN COATED
J058	95A	90-	23-	A	TIN COATED
J059	95A	90-	23-	A	TIN COATED
J060	95A	90-	23-	A	TIN COATED
J061	95A	90-	23-	A	TIN COATED
J062	95A	90-	23-	A	TIN COATED
J063	95A	90-	23-	A	TIN COATED
J064	95A	90-	23-	A	TIN COATED
J065	95A	90-	23-	A	TIN COATED
J066	95A	90-	23-	A	TIN COATED
J067	95A	90-	23-	A	TIN COATED
J068	95A	90-	23-	A	TIN COATED
J069	95A	90-	23-	A	TIN COATED
J070	95A	90-	23-	A	TIN COATED
J071	95A	90-	23-	A	TIN COATED
J072	95A	90-	23-	A	TIN COATED
J073	95A	90-	23-	A	TIN COATED
J074	95A	90-	23-	A	TIN COATED
J075	95A	90-	23-	A	TIN COATED
J076	95A	90-	23-	A	TIN COATED
J077	95A	90-	23-	A	TIN COATED
J078	95A	90-	23-	A	TIN COATED
J079	95A	90-	23-	A	TIN COATED
J080	95A	90-	23-	A	TIN COATED
J081	95A	90-	23-	A	TIN COATED
J082	95A	90-	23-	A	TIN COATED
J083	95A	90-	23-	A	TIN COATED
J084	95A	90-	23-	A	TIN COATED
J085	95A	90-	23-	A	TIN COATED
J086	95A	90-	23-	A	TIN COATED
J087	95A	90-	23-	A	TIN COATED
J088	95A	90-	23-	A	TIN COATED
J089	95A	90-	23-	A	TIN COATED
J090	95A	90-	23-	A	TIN COATED
J091	95A	90-	23-	A	TIN COATED
J092	95A	90-	23-	A	TIN COATED
J093	95A	90-	23-	A	TIN COATED
J094	95A	90-	23-	A	TIN COATED
J095	95A	90-	23-	A	TIN COATED
J096	95A	90-	23-	A	TIN COATED
J097	95A	90-	23-	A	TIN COATED
J098	95A	90-	23-	A	TIN COATED
J099	95A	90-	23-	A	TIN COATED

LOCATION	CMPC350DAI	SPECIFICATION
Q101	57A 420- P- T	TRANSISTOR
Q102	57A 419- P- T	TRANSISTOR
Q103	57A 420- P- T	TRANSISTOR
Q107	57A 419- P- T	TRAN 2SC945P TAPING
Q103	57A 420- P- T	TRANSISTOR
Q108	57A 420- P- T	TRANSISTOR
Q109	57A 419- P- T	TRAN 2SC945P TAPING
Q201	57A 419- P- T	TRAN 2SC945P TAPING
Q401	57A 419- P- T	TRAN 2SC945P TAPING
Q402	57A 419- P- T	TRAN 2SC945P TAPING
Q405	57A 420- P- T	TRANSISTOR
Q413	57A 420- P- T	TRANSISTOR
Q470	57A 419- P- T	TRAN 2SC945P TAPING
Q604	57A 419- P- T	TRAN 2SC945P NEC TAPING
Q605	57A 419- P- T	TRAN 2SC945P NEC TAPING
Q701	57A 419- P- T	TRAN 2SC945P TAPING
Q703	57A 419- P- T	TRAN 2SC945P TAPING
Q709	57A 420- P- T	TRANSISTOR
Q710	57A 420- P- T	TRANSISTOR
Q711	57A 419- P- T	TRAN 2SC945P TAPING
Q712	57A 690- 1- T	TR. 2SB649A/HITACHI
Q904	57A 419- P- T	TRAN 2SC945P TAPING
Q905	57A 420- P- T	TRANSISTOR
Q906	57A 420- P- T	TRANSISTOR
Q907	57A 419- P- T	TRAN 2SC945P TAPING
Q921	57A 419- P- T	TRAN 2SC945P TAPING
Q923	57A 420- P- T	TRANSISTOR
R101	61A 602- 102- 52T	1K OHM 5% 1/6W
R102	61A 602- 102- 52T	1K OHM 5% 1/6W
R103	61A 602- 102- 52T	1K OHM 5% 1/6W
R104	61A 602- 102- 52T	1K OHM 5% 1/6W
R105	61A 602- 102- 52T	1K OHM 5% 1/6W
R106	61A 602- 102- 52T	1K OHM 5% 1/6W
R107	61A 602- 102- 52T	1K OHM 5% 1/6W
R108	61A 602- 472- 52T	4.7K OHM 5% 1/6W
R109	61A 602- 472- 52T	4.7K OHM 5% 1/6W
R110	61A 602- 272- 52T	2.7K OHM 5% 1/6W
R111	61A 602- 102- 52T	1K OHM 5% 1/6W
R112	61A 602- 102- 52T	1K OHM 5% 1/6W
R113	61A 602- 221- 52T	220 OHM 5% 1/6W
R114	61A 602- 102- 52T	1K OHM 5% 1/6W
R115	61A 602- 221- 52T	220 OHM 5% 1/6W
R116	61A 602- 102- 52T	1K OHM 5% 1/6W
R117	61A 602- 222- 52T	2.2K OHM 5% 1/6W
R118	61A 602- 103- 52T	10K OHM 5% 1/6W
R119	61A 602- 103- 52T	10K OHM 5% 1/6W
R120	61A 602- 222- 52T	2.2K OHM 5% 1/6W
R130	61A 602- 472- 52T	4.7K OHM 5% 1/6W
R131	61A 602- 103- 52T	10K OHM 5% 1/6W
R132	61A 602- 222- 52T	2.2K OHM 5% 1/6W
R133	61A 602- 124- 52T	120K OHM 5% 1/6W
R134	61A 602- 472- 52T	4.7K OHM 5% 1/6W
R135	61A 602- 103- 52T	10K OHM 5% 1/6W
R140	61A 602- 222- 52T	2.2K OHM 5% 1/6W
R141	61A 602- 103- 52T	10K OHM 5% 1/6W
R145	61A 602- 472- 52T	4.7K OHM 5% 1/6W
R146	61A 602- 103- 52T	10K OHM 5% 1/6W
R147	61A 602- 472- 52T	4.7K OHM 5% 1/6W
R148	61A 602- 103- 52T	10K OHM 5% 1/6W
R149	61A 602- 472- 52T	4.7K OHM 5% 1/6W
R150	61A 602- 103- 52T	10K OHM 5% 1/6W
R151	61A 602- 222- 52T	2.2K OHM 5% 1/6W
R152	61A 602- 152- 52T	1.5K OHM 5% 1/6W

LOCATION	CMPC350DAI	SPECIFICATION
R153	61A 602- 473- 52T	47K OHM 5% 1/6W
R154	61A 602- 223- 52T	2.2K OHM 5% 1/6W
R156	61A 602- 472- 52T	4.7K OHM 5% 1/6W
R159	61A 602- 102- 52T	1K OHM 5% 1/6W
R160	61A 602- 202- 52T	2K OHM 5% 1/6W
R163	61A 602- 393- 52T	39K OHM 5% 1/6W
R164	61A 602- 102- 52T	1K OHM 5% 1/6W
R165	61A 602- 202- 52T	2K OHM 5% 1/6W
R166	61A 602- 472- 52T	4.7K OHM 5% 1/6W
R167	61A 602- 472- 52T	4.7K OHM 5% 1/6W
R168	61A 602- 101- 52T	100 OHM 5% 1/6W
R169	61A 602- 102- 52T	1K OHM 5% 1/6W
R203	61A 602- 152- 52T	1.5K OHM 5% 1/6W
R204	61A 602- 203- 52T	20K OHM 5% 1/6W
R205	61A 602- 203- 52T	20K OHM 5% 1/6W
R206	61A 602- 223- 52T	22K OHM 5% 1/6W
R207	61A 602- 223- 52T	22K OHM 5% 1/6W
R208	61A 602- 223- 52T	22K OHM 5% 1/6W
R209	61A 602- 223- 52T	22K OHM 5% 1/6W
R210	61A 602- 913- 52T	91K OHM 5% 1/6W
R211	61A 602- 103- 52T	10K OHM 5% 1/6W
R212	61A 602- 393- 52T	39K OHM 5% 1/6W
R214	61A 602- 433- 52T	43K OHM 5% 1/6W
R215	61A 172- 334- 52T	330K OHM 5% 1/4W
R216	61A 602- 433- 52T	43K OHM 5% 1/6W
R217	61A 602- 103- 52T	10K OHM 5% 1/6W
R242	61A 175L- 150- 52T	15 OHM 5% 1/2W
R401	61A 602- 563- 52T	56K OHM 5% 1/6W
R402	61A 602- 222- 52T	2.2K OHM 5% 1/6W
R403	61A 602- 102- 52T	1K OHM 5% 1/6W
R404	61A 602- 222- 52T	2.2K OHM 5% 1/6W
R405	61A 602- 223- 52T	22K OHM 5% 1/6W
R406	61A 602- 113- 52T	11K OHM 5% 1/6W
R407	61A 602- 102- 52T	1K OHM 5% 1/6W
R408	61A 602- 102- 52T	1K OHM 5% 1/6W
R409	61A 602- 103- 52T	10K OHM 5% 1/6W
R410	61A 602- 102- 52T	1K OHM 5% 1/6W
R411	61A 602- 221- 52T	200 OHM 5% 1/6W
R413	61A 602- 333- 52T	33K OHM 5% 1/6W
R414	61A 602- 103- 52T	10K OHM 5% 1/6W
R415	61A 210- 182- 52T	1.8K OHM 1% 1/6W
R417	61A 602- 562- 52T	5.6K OHM 5% 1/6W
R418	61A 172- 122- 52T	1.2K OHM 5% 1/4W
R419	61A 210- 183- 52T	18K OHM 1% 1/6W
R420	61A 602- 562- 52T	5.6K OHM 5% 1/6W
R421	61A 602- 103- 52T	10K OHM 5% 1/6W
R422	61A 602- 103- 52T	10K OHM 5% 1/6W
R423	61A 602- 222- 52T	2.2K OHM 5% 1/6W
R424	61A 602- 103- 52T	10K OHM 5% 1/6W
R426	61A 172- 124- 52T	120K OHM 5% 1/4W
R433	61A 602- 222- 52T	2.2K OHM 5% 1/6W
R435	61A 602- 102- 52T	1K OHM 5% 1/6W
R436	61A 172- 272- 52T	2.7K OHM 5% 1/4W
R438	61A 172- 221- 52T	220 OHM 5% 1/4W
R439	61A 175L- 220- 52T	22 OHM 5% 1/2W
R441	61A 175L- 100- 52T	10 OHM 5% 1/2W
R446	61A 172- 472- 52T	4.7K OHM 5% 1/4W
R447	61A 602- 563- 52T	56K OHM 5% 1/6W
R450	61A 602- 182- 52T	1.8K OHM 5% 1/6W
R451	61A 602- 681- 52T	680 OHM 5% 1/6W
R452	61A 300- 681- 52T	680 OHM 5% FUSE RES.
R457	61A 175L- 220- 52T	22 OHM 5% 1/2W

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R458	61A 602- 433- 52T	43K OHM 5% 1/6W
R459	61A 172- 270- 52T	27 OHM 5% 1/4W
R460	61A 172- 225- 52T	2.2MEG OHM 5% 1/4W
R461	61A 602- 183- 52T	18K OHM 5% 1/6W
R462	61A 172- 104- 52T	100K OHM 5% 1/4W
R463	61A 172- 474- 52T	470K OHM 5% 1/4W
R471	61A 602- 471- 52T	470 OHM 5% 1/6W
R472	61A 602- 561- 52T	560 OHM 5% 1/6W
R473	61A 602- 221- 52T	220 OHM 5% 1/6W
R474	61A 602- 221- 52T	220 OHM 5% 1/6W
R601	61A 602- 562- 52T	5.6K OHM 5% 1/6W
R602	61A 172- 364- 52T	360K OHM 5% 1/4W
R603	61A 602- 471- 52T	470 OHM 5% 1/6W
R604	61A 172- 334- 52T	330K OHM 5% 1/4W
R607	61A 602- 332- 52T	3.3K OHM 5% 1/6W
R609	61A 172- 364- 52T	360K OHM 5% 1/4W
R610	61A 602- 753- 52T	75K OHM 5% 1/6W
R613	61A 602- 752- 52T	7.5K OHM 5% 1/6W
R614	61A 602- 243- 52T	24K OHM 5% 1/6W
R618	61A 602- 432- 52T	4.3K OHM 5% 1/6W
R619	61A 602- 184- 52T	180K OHM 5% 1/6W
R620	61A 172- 104- 52T	100K OHM 5% 1/4W
R621	61A 602- 162- 52T	1.6K OHM 5% 1/6W
R622	61A 602- 183- 52T	18K OHM 5% 1/6W
R623	61A 172- 154- 52T	150K OHM 5% 1/4W
R627	61A 175L- 471- 52T	470 OHM 5% 1/2W
R629	61A 602- 221- 52T	220 OHM 5% 1/6W
R631	61A 602- 563- 52T	56K OHM 5% 1/6W
R661	61A 602- 182- 52T	1.8K OHM 5% 1/6W
R662	61A 602- 163- 52T	16K OHM 5% 1/6W
R663	95A 90- 23- A	TIN COATED
R701	61A 602- 123- 52T	12K OHM 5% 1/6W
R702	61A 602- 623- 52T	62K OHM 5% 1/6W
R703	61A 602- 103- 52T	10K OHM 5% 1/6W
R704	61A 602- 103- 52T	10K OHM 5% 1/6W
R705	61A 602- 123- 52T	12K OHM 5% 1/6W
R706	61A 602- 102- 52T	1K OHM 5% 1/6W
R707	61A 602- 103- 52T	10K OHM 5% 1/6W
R708	61A 602- 102- 52T	1K OHM 5% 1/6W
R709	61A 602- 103- 52T	10K OHM 5% 1/6W
R710	61A 602- 432- 52T	4.3K OHM 5% 1/6W
R711	61A 602- 182- 52T	1.8K OHM 5% 1/6W
R712	61A 602- 332- 52T	3.3K OHM 5% 1/6W
R713	61A 602- 103- 52T	10K OHM 5% 1/6W
R714	61A 602- 113- 52T	11K OHM 5% 1/6W
R715	61A 602- 432- 52T	4.3K OHM 5% 1/6W
R722	61A 602- 913- 52T	91K OHM 5% 1/6W
R723	61A 602- 273- 52T	27K OHM 5% 1/6W
R724	61A 602- 103- 52T	10K OHM 5% 1/6W
R725	61A 602- 103- 52T	10K OHM 5% 1/6W
R726	61A 602- 103- 52T	10K OHM 5% 1/6W
R727	61A 602- 823- 52T	82K OHM 5% 1/6W
R728	61A 602- 392- 52T	3.9K OHM 5% 1/6W
R729	61A 602- 823- 52T	82K OHM 5% 1/6W
R730	61A 172- 434- 52T	430K OHM 5% 1/4W
R731	61A 172- 479- 52T	4.7 OHM 5% 1/4W
R732	61A 172- 273- 52T	27K OHM 5% 1/4W
R733	61A 175L- 102- 52T	1K OHM 5% 1/2W
R734	61A 602- 102- 52T	1K OHM 5% 1/6W
R737	61A 175L- 823- 52T	82K OHM 5% 1/2W
R738	61A 602- 473- 52T	47K OHM 5% 1/6W
R739	61A 602- 203- 52T	20K OHM 5% 1/6W

LOCATION	CMPC350DAI	SPECIFICATION
R740	61A 172- 479- 52T	4.7K OHM 5% 1/4W
R741	61A 175L- 104- 52T	100K OHM 5% 1/2W
R743	61A 602- 224- 52T	220K OHM 5% 1/6W
R744	61A 602- 243- 52T	24K OHM 5% 1/6W
R745	95A 90- 23- A	TIN COATED
R903	61A 200- 479- 52T	4.7K OHM 1% 1/4W
R906	61A 172- 102- 52T	1K OHM 5% 1/4W
R909	61A 172- 151- 52T	150 OHM 5% 1/4W
R910	61A 172- 203- 52T	20K OHM 5% 1/4W
R901	61A 175L- 474- 52T	470K OHM 5% 1/2W
⚠ R912	61A 172- 242- 52T	2.4K OHM 5% 1/4W
R913	61A 172- 431- 52T	430K OHM 5% 1/4W
R911	61A 172- 102- 52T	1K OHM 5% 1/4W
R914	61A 172- 154- 52T	150K OHM 5% 1/4W
R916	61A 172- 223- 52T	22K OHM 5% 1/4W
R917	61A 172- 470- 52T	47K OHM 5% 1/4W
R918	61A 172- 181- 52T	180 OHM 5% 1/4W
R919	61A 172- 102- 52T	1K OHM 5% 1/4W
R921	61A 172- 331- 52T	330 OHM 5% 1/4W
R922	61A 172- 101- 52T	100 OHM 5% 1/4W
R925	61A 172- 103- 52T	10K OHM 5% 1/4W
R928	61A 172- 220- 52T	22 OHM 5% 1/4W
R929	61A 172- 103- 52T	10K OHM 5% 1/4W
R930	61A 200- 479- 52T	4.7K OHM 1% 1/4W
R931	61A 172- 103- 52T	10K OHM 5% 1/4W
R932	61A 172- 104- 52T	100K OHM 5% 1/4W
R933	61A 172- 474- 52T	470K OHM 5% 1/4W
R934	61A 172- 205- 52T	2MEG OHM 5% 1/4W
R935	61A 172- 243- 52T	24K OHM 5% 1/4W
R936	61A 172- 274- 52T	270K OHM 5% 1/4W
⚠ R940	61A 172- 824- 52T	820K OHM 5% 1/4W
R941	61A 172- 473- 52T	47K OHM 5% 1/4W
R942	61A 172- 101- 52T	100 OHM 5% 1/4W
R943	61A 172- 223- 52T	22K OHM 5% 1/4W
R944	61A 172- 470- 52T	47 OHM 5% 1/4W
R945	61A 171- 223- 52T	22K OHM 5% 1/4W
R947	61A 172- 333- 52T	33K OHM 5% 1/4W
R948	61A 172- 220- 52T	22 OHM 5% 1/4W
R949	61A 172- 102- 52T	1K OHM 5% 1/4W
R950	61A 175L- 203- 52T	20K OHM 5% 1/2W
R951	61A 172- 104- 52T	100K OHM 5% 1/4W
R952	61A 175L- 154- 52T	150K OHM 5% 1/2W
R953	61A 172- 272- 52T	2.7K OHM 5% 1/4W
R954	61A 602- 103- 52T	10K OHM 5% 1/6W
R955	61A 172- 102- 52T	1K OHM 5% 1/4W
R957	61A 172- 102- 52T	1K OHM 5% 1/4W
R958	61A 172- 101- 52T	100 OHM 5% 1/4W
R959	61A 172- 101- 52T	100 OHM 5% 1/4W
R961	61A 172- 473- 52T	47K OHM 5% 1/4W
R962	61A 172- 753- 52T	75K OHM 5% 1/4W
R963	95A 90- 23- A	TIN COATED
R964	61A 172- 202- 52T	2K OHM 5% 1/4W
⚠ R965	61A 172- 472- 52T	4.7K OHM 5% 1/4W
R966	61A 175L- 102- 52T	1K OHM 5% 1/2W
ZD101	93A 39- 127- 52T	ZD RD5.1EB2/NEC
ZD102	93A 39- 126- 52T	ZD RD3.6EB2/NEC
ZD103	93A 39- 128- 52T	ZD RD6.2EB2/NEC
ZD703	93A 39- 129- 52T	ZD RD9.1EB3/NEC
⚠ ZD401	93A 39- 128- 52T	ZD RD6.2EB2/NEC

PARTS LIST OF CRT PC BOARD

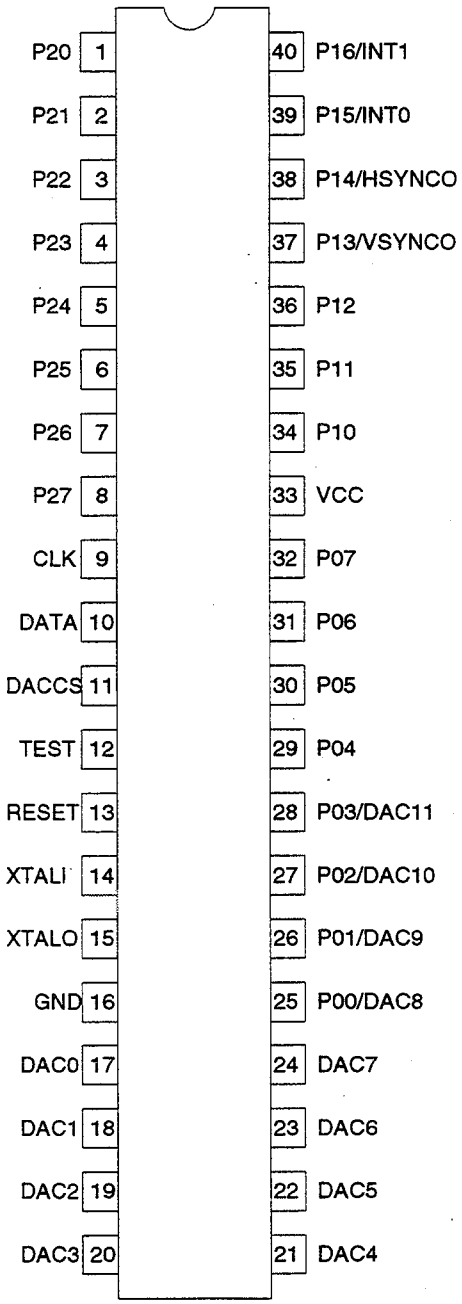
LOCATION	CRPC350D				SPECIFICATION
	CRPC350DAI				CRT BOARD AUTO INS.
	9A	203-	8		PIN
	87A	3502-	1		CRT SOCKET
	90A	315-	2		HEAT SINK
	95A	205-	30-	082	WIRE
	N1A	330-	10-	128	SCREW
C826	67A	309-	109-	10	1uF +-20% 160V
C827	67A	309-	109-	10	1uF +-20% 160V
C828	67A	309-	109-	10	1uF +-20% 160V
C832	67A	60-	109-	9	1uF +-20% 100V
C833	67A	60-	109-	9	1uF +-20% 100V
C834	67A	60-	109-	9	1uF +-20% 100V
C835	67A	309-	470-	9	47uF +-20% 100V
C837	65A	2K-	221-	5A	220PF 10% 2KV
C838	65A	2Z-	103-	4B	0.01uF +80-20% 2K Z5V
C849	65A	1K-	331-	2A	330PF +-10% Z5P
C851	67A	309-	109-	11	1uF +-20% 200V
D921	93A	2020-	3		F.R.D. 200V/2A 25NS
D922	93A	2020-	3		F.R.D. 200V/2A 25NS
D924	93A	2020-	3		F.R.D. 200V/2A 25NS
D926	93A	2020-	3		F.R.D. 200V/2A 25NS
H803	95A	8013-	6-	1	6P WIRE
IC801	56A	366-	1		28PIN IC LM1203N/N.S.
IC802	56A	1133-	1		8PIN IC24LC21
L801	73A	53-	341		4.7UH +-5%
L803	73A	53-	341		4.7UH +-5%
L804	73A	53-	337		3.3UH +-5%
L805	73A	53-	337		3.3UH +-5%
L806	73A	53-	337		3.3UH +-5%
P801	33A	3278-	11		11P PLUG
P804	33A	3278-	7		7P PLUG
Q807	57A	494-	5		TR. HSD1690D
Q808	57A	494-	5		TR. HSD1690D
Q809	57A	494-	5		TR. HSD1690D
Q810	57A	694-	1		TR. 2SD756/HITACHI
Q811	57A	693-	1		TR. 2SB716/HITACH
Q812	57A	694-	1		TR. 2SD756/HITACHI
Q813	57A	693-	1		TR. 2SB716/HITACH
Q814	57A	694-	1		TR. 2SD756/HITACHI
Q815	57A	693-	1		TR. 2SB716/HITACH
R839	61A	105J-	182-	67	1.8K OHM 5% 5W
R840	61A	301-	479-	64	4.7 OHM 5% 1/2W
R847	61A	105J-	182-	67	1.8K OHM 5% 5W
R848	61A	301-	479-	64	4.7 OHM 5% 1/2W
R855	61A	105J-	182-	67	1.8K OHM 5% 5W
R856	61A	301-	479-	64	4.7 OHM 5% 1/2W
R864	61A	152M-	101-	64	100 OHM 5% 2W
SG804	62A	10-	6		SPARK GAP 1KV
SG805	62A	10-	6		SPARK GAP 1KV
VR802	75A	345-	101		100 OHM +-20%
VR803	75A	345-	101		100 OHM +-20%
VR804	75A	345-	303		30K OHM +-20%
VR805	75A	345-	303		30K OHM +-20%
VR806	75A	345-	303		30K OHM +-20%

LOCATION	CRPC350DAI	SPECIFICATION
	7 15A 568- 1	PCB
C801	67A 309- 101- 4T	100uF +-20% 25V
C802	65A 444- 102- 13T	1000PF K Z5P 50V
C803	67A 309- 479- 7T	4.7uF +-20% 50V
C804	67A 309- 479- 7T	4.7uF +-20% 50V
C805	67A 309- 479- 7T	4.7uF +-20% 50V
C806	67A 309- 479- 7T	4.7uF +-20% 50V
C807	65A 450- 104- 7T	0.1uF +80-20% 50VY5V
C808	65A 450- 104- 7T	0.1uF +80-20% 50VY5V
C809	65A 450- 104- 7T	0.1uF +80-20% 50VY5V
C810	65A 450- 104- 7T	0.1uF +80-20% 50VY5V
C811	67A 309- 101- 4T	100uF +-20% 25V
C812	65A 450- 104- 7T	0.1uF +80-20% 50VY5V
C813	65A 450- 104- 7T	0.1uF +80-20% 50VY5V
C814	65A 450- 104- 7T	0.1uF +80-20% 50VY5V
C815	67A 309- 101- 4T	100uF +-20% 25V
C816	67A 309- 101- 4T	100uF +-20% 25V
C818	65A 450- 104- 7T	0.1uF +80-20% 50VY5V
C819	65A 442- 680- 13T	68PF J NPO 50V
C820	65A 442- 151- 13T	150PF J NPO 50V
C821	65A 442- 680- 13T	68PF J NPO 50V
C822	67A 309- 100- 7T	10uF +-20% 50V
C823	65A 450- 104- 7T	0.1uF +80-20% 50VY5V
C824	65A 450- 104- 7T	0.1uF +80-20% 50VY5V
C825	65A 450- 104- 7T	0.1uF +80-20% 50VY5V
C829	64A 176J- 104- 1T	0.1uF +-5% 100V
C830	64A 176J- 104- 1T	0.1uF +-5% 100V
C831	64A 176J- 104- 1T	0.1uF +-5% 100V
C836	67A 309- 470- 7T	47uF +-20% 50V
C839	65A 450- 104- 7T	0.1uF +80-20% 50VY5V
C840	65A 450- 104- 7T	0.1uF +80-20% 50VY5V
C841	67A 309- 101- 4T	100uF +-20% 25V
C843	67A 309- 109- 7T	1uF +-20% 50V
C847	64A 176J- 104- 1T	0.1uF +-5% 100V
C848	64A 176J- 104- 1T	0.1uF +-5% 100V
C881	65A 444- 103- 5T	0.01uF +-10% 50V Y5P
D801	93A 64- 11H- 52T	DIODE 1N4148/HITACH
D802	93A 64- 11H- 52T	DIODE 1N4148/HITACH
D806	93A 64- 11H- 52T	DIODE 1N4148/HITACH
D807	93A 64- 11H- 52T	DIODE 1N4148/HITACH
D808	93A 64- 11H- 52T	DIODE 1N4148/HITACH
D809	93A 64- 11H- 52T	DIODE 1N4148/HITACH
D810	93A 64- 11H- 52T	DIODE 1N4148/HITACH
D811	93A 64- 11H- 52T	DIODE 1N4148/HITACH
D812	93A 64- 11H- 52T	DIODE 1N4148/HITACH
D813	93A 64- 11H- 52T	DIODE 1N4148/HITACH
D814	93A 64- 11H- 52T	DIODE 1N4148/HITACH
D815	93A 64- 11H- 52T	DIODE 1N4148/HITACH
D816	93A 64- 11H- 52T	DIODE 1N4148/HITACH
D821	93A 64- 11H- 52T	DIODE 1N4148/HITACH
D823	93A 64- 11H- 52T	DIODE 1N4148/HITACH
D829	93A 64- 11H- 52T	DIODE 1N4148/HITACH
D831	93A 64- 11H- 52T	DIODE 1N4148/HITACH
FB801	95A 90- 23- A	TIN COATED
FB802	95A 90- 23- A	TIN COATED
FB803	95A 90- 23- A	TIN COATED
J801	95A 90- 23- A	TIN COATED
J802	95A 90- 23- A	TIN COATED
J803	95A 90- 23- A	TIN COATED
J804	95A 90- 23- A	TIN COATED
J805	95A 90- 23- A	TIN COATED
J806	95A 90- 23- A	TIN COATED

LOCATION	CRPC350DAI	SPECIFICATION
J807	95A 90- 23- A	TIN COATED
J808	95A 90- 23- A	TIN COATED
J809	95A 90- 23- A	TIN COATED
J810	95A 90- 23- A	95S90-23 TAPING
J811	95A 90- 23- A	TIN COATED
J812	95A 90- 23- A	TIN COATED
J813	95A 90- 23- A	TIN COATED
J814	95A 90- 23- A	TIN COATED
J805	95A 90- 23- A	TIN COATED
J806	95A 90- 23- A	TIN COATED
J807	95A 90- 23- A	TIN COATED
J808	95A 90- 23- A	TIN COATED
J820	95A 90- 23- A	95S90-23 TAPING
J821	95A 90- 23- A	TIN COATED
J822	95A 90- 23- A	95S90-23 TAPING
L807	95A 90- 23- A	TIN COATED
L808	95A 90- 23- A	TIN COATED
L809	95A 90- 23- A	TIN COATED
Q802	57A 419- P- T	TRAN 2SC945P TAPING
Q803	57A 419- P- T	TRAN 2SC945P TAPING
Q804	57A 419- P- T	TRAN 2SC945P TAPING
Q805	57A 419- P- T	TRAN 2SC945P TAPING
Q806	57A 419- P- T	TRAN 2SC945P TAPING
Q811	57A 693- 1- T	TR.2SB716/HITACHI
Q813	57A 693- 1- T	TR.2SB716/HITACHI
Q815	57A 693- 1- T	TR.2SB716/HITACHI
Q816	57A 420- P- T	TRAN 2SA733P TAPING
Q881	57A 419- P- T	TRAN 2SC945P TAPING
R801	61A 602- 750- 52T	75 OHM +-5% 1/6W
R802	61A 602- 750- 52T	75 OHM +-5% 1/6W
R803	61A 602- 750- 52T	75 OHM +-5% 1//6W
R804	61A 602- 103- 52T	10K OHM +-5% 1//6W
R805	61A 602- 103- 52T	10K OHM +-5% 1//6W
R806	61A 602- 103- 52T	10K OHM +-5% 1//6W
R808	61A 602- 103- 52T	10K OHM +-5% 1//6W
R811	61A 602- 101- 52T	100 OHM +-5% 1//6W
R812	61A 602- 101- 52T	100 OHM +-5% 1//6W
R814	61A 602- 822- 52T	8.2K OHM +-5% 1//6W
R815	61A 602- 222- 52T	2.2K OHM +-5% 1//6W
R816	61A 602- 202- 52T	2K OHM +-5% 1//6W
R817	61A 602- 103- 52T	10K OHM +-5% 1//6W
R818	61A 602- 122- 52T	1.2K OHM +-5% 1//6W
R819	61A 602- 391- 52T	390 OHM +-5% 1//6W
R820	61A 602- 391- 52T	390 OHM +-5% 1//6W
R821	61A 602- 820- 52T	82 OHM +-5% 1//6W
R822	61A 602- 820- 52T	82 OHM +-5% 1//6W
R823	61A 602- 391- 52T	390 OHM +-5% 1//6W
R824	61A 602- 391- 52T	390 OHM +-5% 1//6W
R825	61A 602- 820- 52T	82 OHM +-5% 1//6W
R826	61A 602- 820- 52T	82 OHM +-5% 1//6W
R827	61A 602- 391- 52T	390 OHM +-5% 1//6W
R828	61A 602- 391- 52T	390 OHM +-5% 1//6W
R830	61A 602- 820- 52T	82 OHM +-5% 1//6W
R830	61A 602- 820- 52T	82 OHM +-5% 1//6W
R831	61A 602- 101- 52T	100 OHM +-5% 1//6W
R832	61A 602- 101- 52T	100 OHM +-5% 1//6W
R833	61A 602- 101- 52T	100 OHM +-5% 1//6W
R841	61A 602- 470- 52T	47 OHM +-5% 1//6W
R842	61A 602- 470- 52T	47 OHM +-5% 1//6W
R844	61A 175L- 560- 52T	56 OHM +-5% 1/2W
R846	61A 602- 105- 52T	1MEG OHM +-5% 1//6W
R849	61A 602- 470- 52T	47 OHM +-5% 1//6W

LOCATION	CRPC350DAI	SPECIFICATION
R850	61A 602- 470- 52T	47 OHM +-5% 1//6W
R852	61A 175L- 560- 52T	56 OHM +-5% 1/2W
R854	61A 172- 105- 52T	1MEG OHM 5% 1//4W
R857	61A 602- 470- 52T	47 OHM +-5% 1//6W
R858	61A 602- 470- 52T	47 OHM +-5% 1//6W
R860	61A 175L- 560- 52T	56 OHM +-5% 1/2W
R862	61A 172- 105- 52T	1MEG OHM 5% 1//4W
R865	61A 175L- 104- 52T	100K OHM +-5% 1/2W
R866	61A 602- 393- 52T	39K OHM +-5% 1//6W
R867	61A 602- 393- 52T	39K OHM +-5% 1//6W
R868	61A 602- 393- 52T	39K OHM +-5% 1//6W
R869	61A 602- 103- 52T	10K OHM 5% 1//6W
R870	61A 602- 101- 52T	100 OHM +-5% 1//6W
R871	61A 602- 102- 52T	1K OHM +-5% 1//6W
R872	61A 602- 473- 52T	47K OHM +-5% 1/6W
R873	61A 602- 103- 52T	10K OHM +-5% 1/6W
R881	61A 602- 102- 52T	1KK OHM +-5% 1/6W
R882	61A 602- 102- 52T	1KK OHM +-5% 1/6W
R883	61A 602- 102- 52T	1KK OHM +-5% 1/6W
ZD801	93A 39- 77- 52T	5.1V ZENER
ZD802	93A 39- 77- 52T	5.1V ZENER

IC101
UM6860



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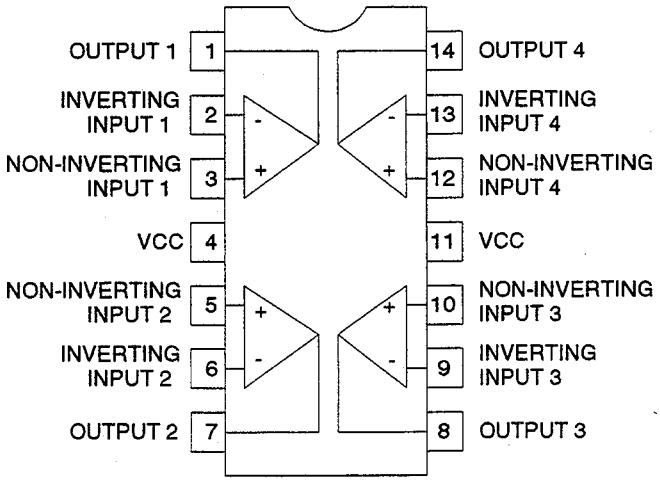

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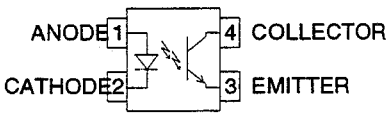
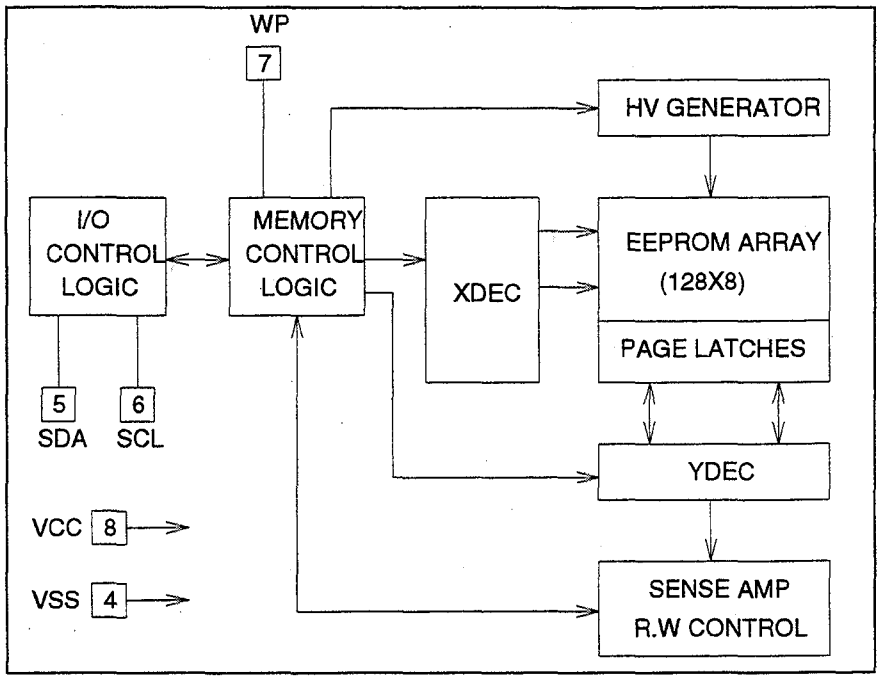


IC102 24LC02B



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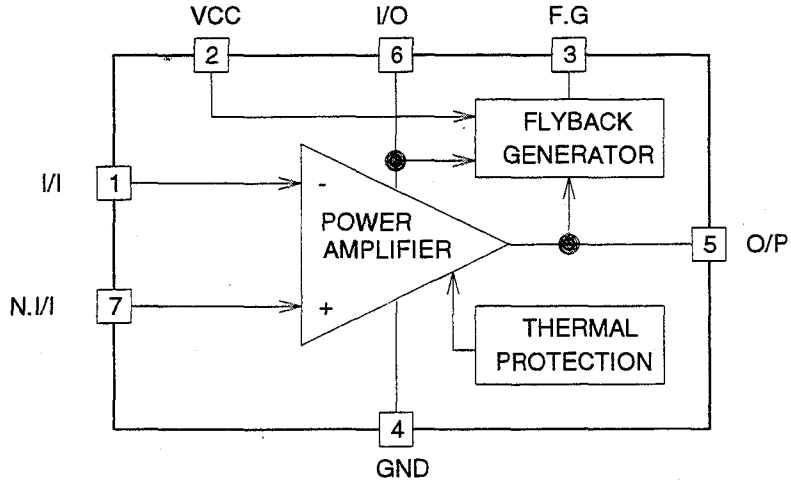
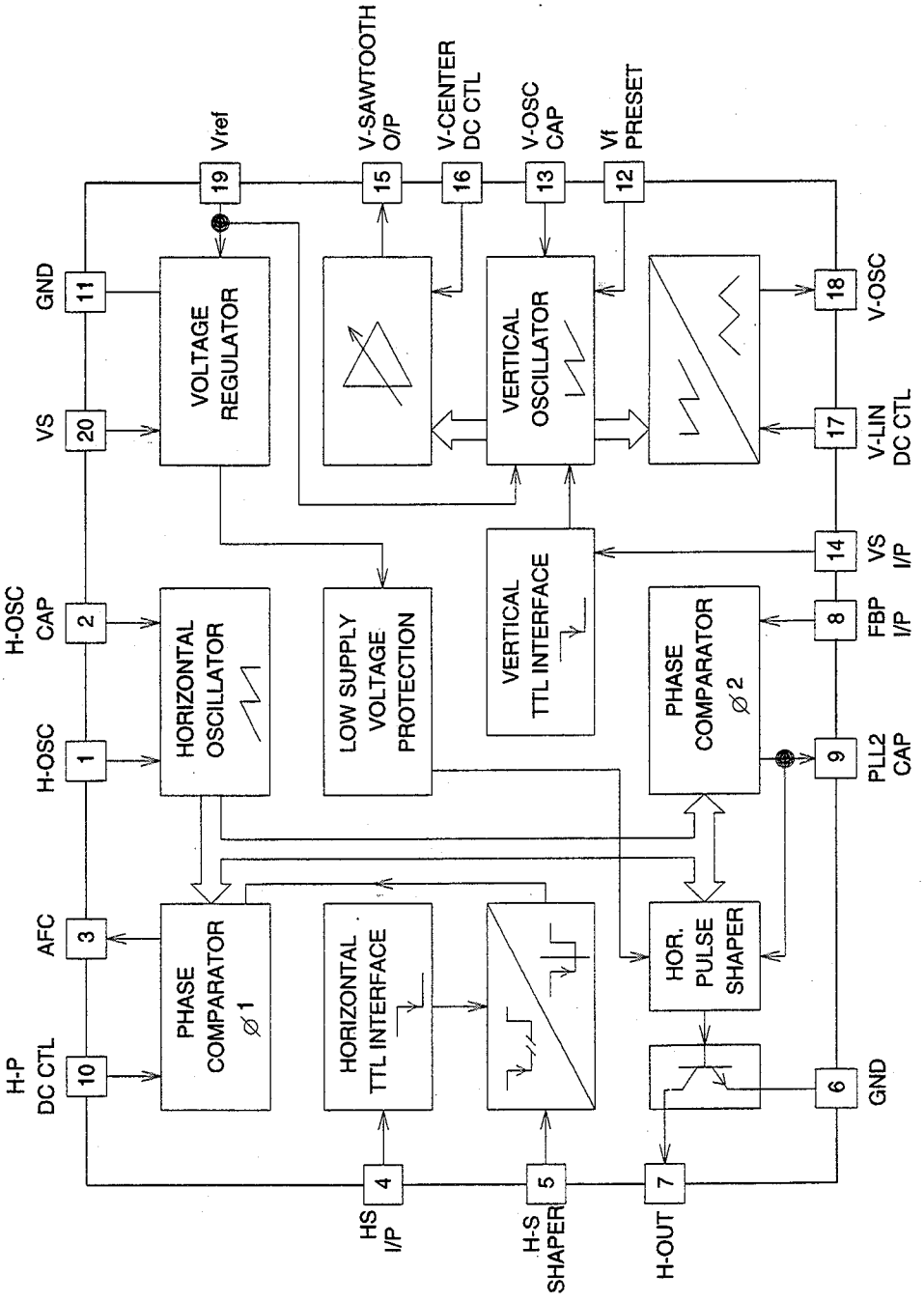


IC401 TDA9102C



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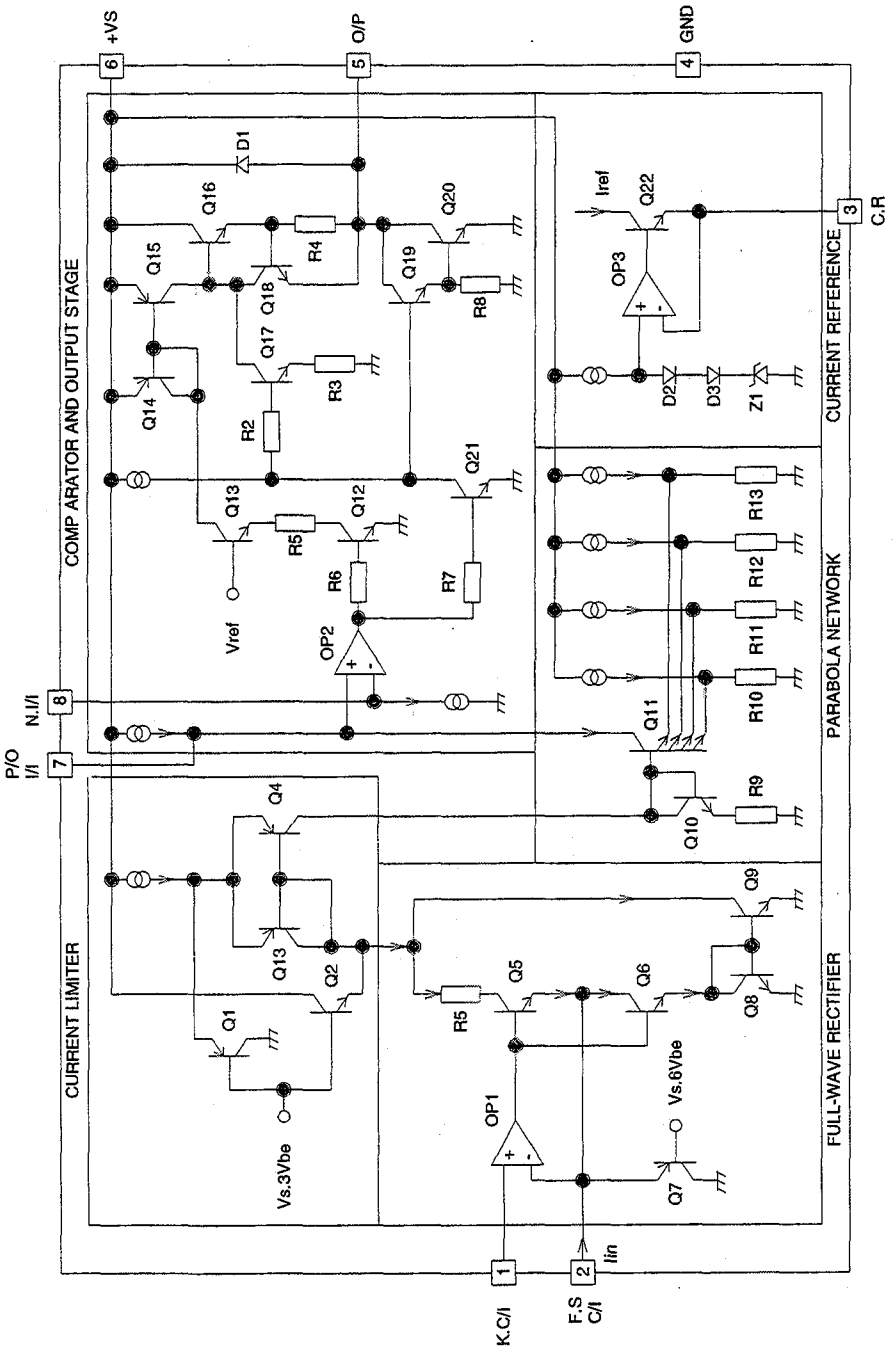

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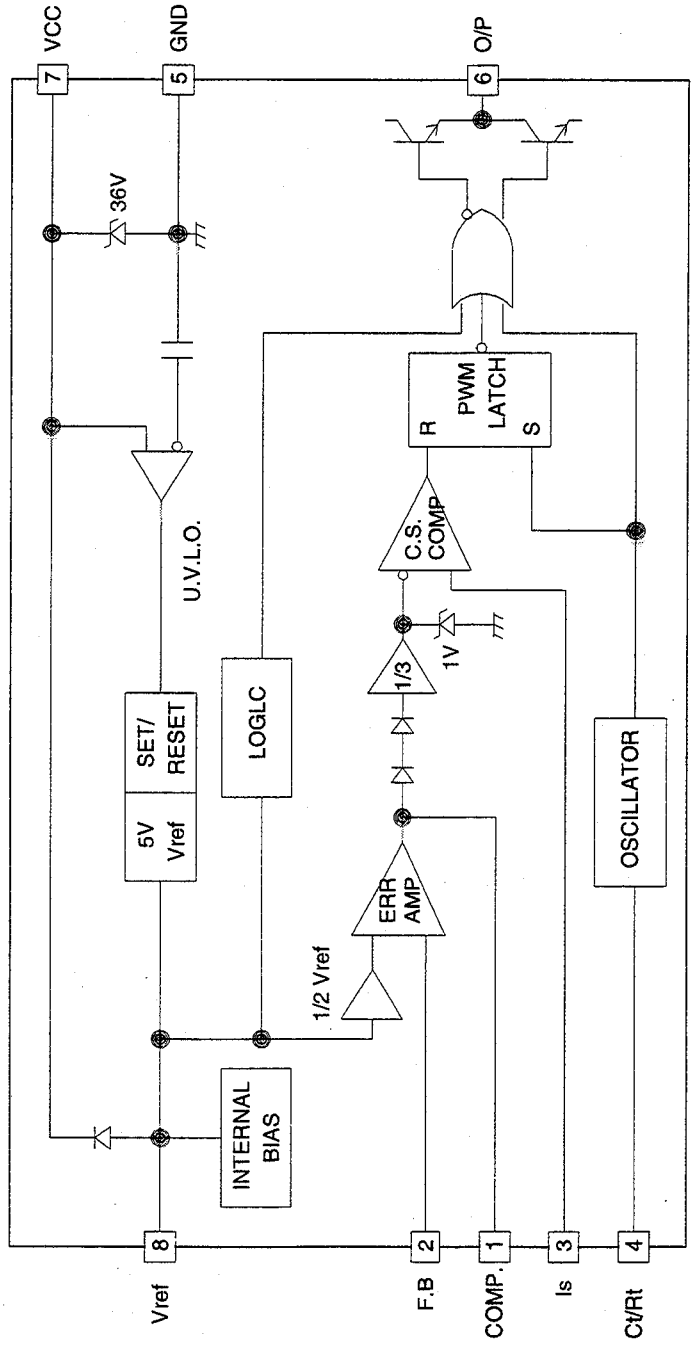

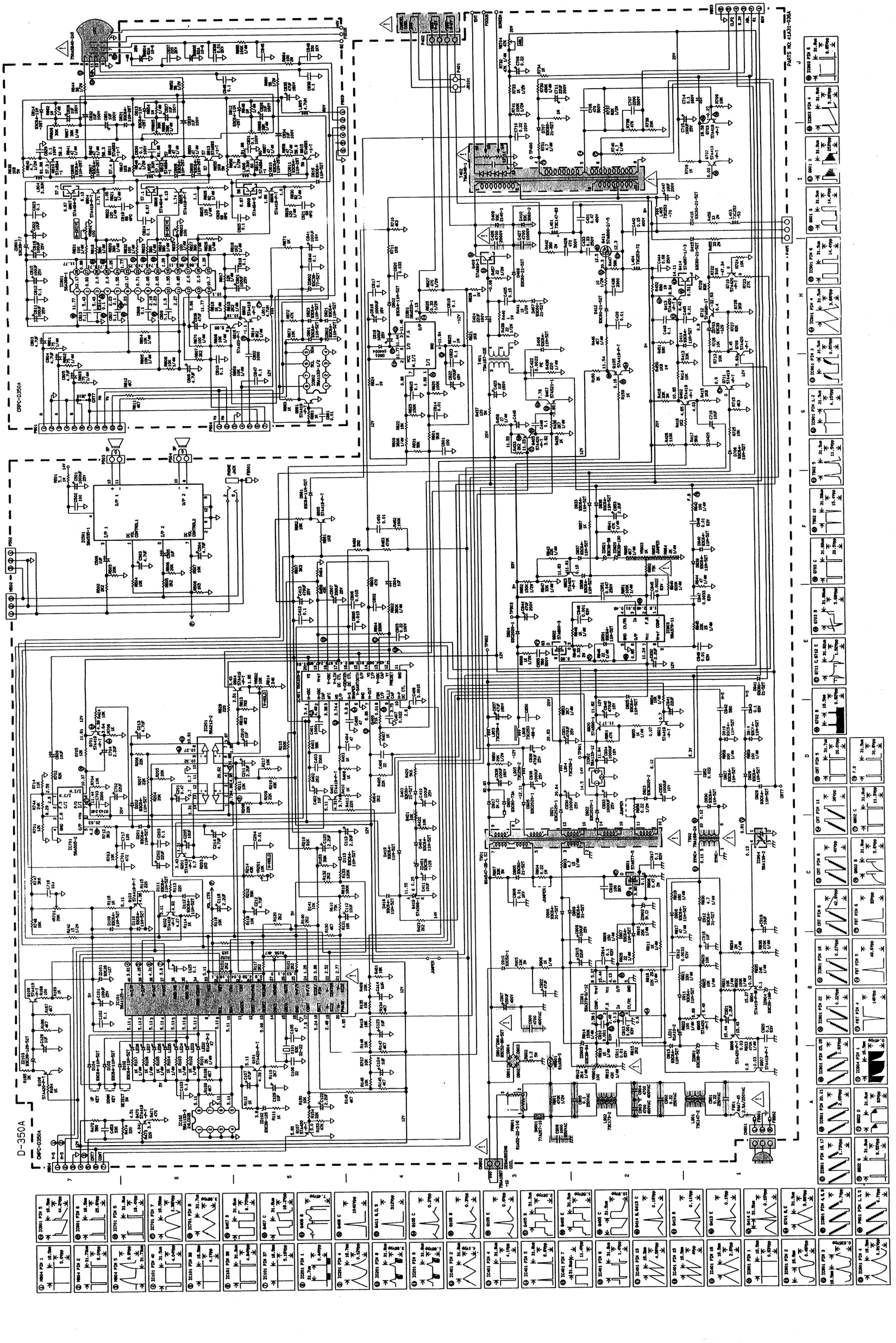
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